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1	IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS
2	TYLER DIVISION
3	SMARTFLASH LLC and)
4	SMARTFLASH TECHNOLOGIES DOCKET NO. 6:13cv447
5	-vs-
б	Tyler, Texas
7) 9:26 a.m. APPLE INC. February 23, 2015
8	
9	TRANSCRIPT OF TRIAL
10	MORNING SESSION BEFORE THE HONORABLE RODNEY GILSTRAP,
11	UNITED STATES DISTRICT JUDGE
12	
13	<u>A P P E A R A N C E S</u>
14	
15	FOR THE PLAINTIFFS:
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24	Proceedings taken by Machine Stenotype; transcript was	
25	produced by a Computer.	

1 PROCEEDINGS 2 (Jury out.) 3 COURT SECURITY OFFICER: All rise. 4 THE COURT: Be seated, please. 5 All right. Are the parties ready to read into the record those items from the list of pre-admitted exhibits 6 7 that were used during Thursday's portion of the trial? 8 MR. CASSADY: Yes, Your Honor. And I only have one 9 exhibit, so I --10 THE COURT: You can read it in from there. 11 MR. CASSADY: Okay. Your Honor, the Plaintiffs admit PX 756. 12 13 THE COURT: Any objection? MR. POST: No objection, Your Honor. 14 THE COURT: Do Defendants have a similar rendition? 15 MR. POST: Yes, we do, Your Honor. 16 17 Defendant's request admission of the following 18 exhibits: DX 10, DX 23, DX 26, DX 27, DX 28, DX 29, DX 31, 19 DX 33, DX 35, DX 39, DX 40, DX 42, DX 44, DX 45, DX 81, 20 DX 240, DX 303, DX 304, DX 347, DX 348, DX 447, DX 448, and 21 DX 449, Your Honor. 22 THE COURT: Is there objection from the Plaintiff? 23 MR. CASSADY: No, Your Honor. 24 THE COURT: All right. Dr. Dhar, are you present 25 and ready to return to the witness stand, please?

1 And, Plaintiff, whoever is going to cross-examine 2 Dr. Dhar, go to the podium. 3 And please bring in the jury. 4 COURT SECURITY OFFICER: All rise for the jury. 5 (Jury in.) THE COURT: Please be seated. 6 7 All right. When we recessed Thursday, Defendants had rested with regard to the witness, and we'll now proceed 8 9 with Defendant's cross-examination of the witness. 10 MR. WARD: May I proceed? THE COURT: You may. 11 12 RAVI DHAR, DEFENDANT'S WITNESS, PREVIOUSLY SWORN 13 CROSS-EXAMINATION 14 BY MR. WARD: 15 Good morning, Dr. Dhar. Q. Good morning. 16 Α. 17 My name is Johnny Ward; and you and I have not met prior 18 to today, have we, sir? That's true, sir. 19 Α. 20 When you finished testifying on Thursday, you'd gone 21 through your opinions with respect to Dr. Wecker's survey, 22 correct? 23 Broadly speaking, yes. Α. 24 Ο. Broadly speaking. And remind me your hourly rate? 25

- A. \$750 per hour.
- 2 | Q. You're not here to provide the jury with your own survey
- 3 results that could somehow be utilized by either Mr. Mills or
- 4 Dr. Becker to assist the jury in calculating damages, are
- 5 you?

- 6 A. That's correct.
- 7 | Q. That's not what you were asked to do.
 - A. That's correct. I was not asked to do that.
- 9 MR. WARD: Can we look at the transcript from
- 10 | February 18th, Page 16, Line 17?
- 11 Q. (By Mr. Ward) Were you here when Mr. Batchelder was
- 12 | asking questions of Mr. Mills?
- 13 | A. Yes, I was.
- 14 \parallel Q. And do you recall when Mr. Batchelder was asking Mr.
- 15 | Mills these questions starting at Page 16, Line 17: You've
- 16 chosen to disregard Dr. Dhar's surveys because Dr. Wecker
- 17 | said they're flawed, right?
- 18 And then you remember Mr. Mills giving this answer: Not
- 19 entirely, sir; that's not the entire reason.
- 20 | A. That's -- that's what it says. I don't remember the
- 21 ∥ details, yes.
- 22 | O. You've chosen not to rely on them, correct?
- 23 And he said: Well, he doesn't -- and there's some back
- 24 | and forth in there on -- going to Page 17, Line 1: He isn't
- 25 | offering that opinion.

- That's Mr. Mills speaking of you. You understand that?
- 2 A. Sorry. Where is -- where should I be reading?
 - Q. Down here to -- right there, Page 17, Line 1.
- 4 A. Yes, I see that.
- 5 | 0. You're not offering an opinion.
- 6 A. On the value of the feature, correct.
- $7 \parallel Q$. Right.

- A. I'm not.
- 9 Q. And so then we go down here, there's some back and 10 forth, and we go down to Line 7.
- Dr. Dhar didn't do a survey that determines value, so there was not a survey I could rely on from Dr. Dhar.
- 13 | That's accurate, isn't it?
- 14 A. Yes. I agree with Mr. Mills on that.
- Q. And then Mr. Batchelder says: Dr. Dhar has conducted two surveys in this case, correct?
- 17 Answer: Yes, sir. As far as I know, that's correct.
- And then Mr. Batchelder asked him: And you've chosen not to rely on either one of them, correct?
- And his answer is: Well, they're not the kind of survey
 that I could rely on for damage -- for a damages opinion.
- And you agree with that answer from Mr. Mills, don't you?
- A. Well, my statement would be that my surveys speak to the reliability of Dr. Wecker's calculations. So he can rely on

- that in that regard. But I don't -- I don't have a survey that provides an alternative value.
- Q. Right. So he could -- if he wanted to, he could rely upon your opinion that says, disregard Dr. Wecker; is what you're telling the jury?
- 6 A. Correct.

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- Q. So disregard Dr. Wecker and then leave Mr. Mills there saying: Well, I don't have a survey to rely upon. That's the extent to which he could rely on your surveys.
- 10 A. That is correct.
- MR. WARD: All right. You can take that down,

 Mr. Mortensen.
- Q. (By Mr. Ward) Would you agree with me that your opinions as an expert witness can only be as good as the information that you're provided in order to formulate your opinions.
- A. Not just provided, but information that I gather.

 Broadly speaking, that is correct.
 - Q. And so the information that you review --
- 19 A. And I -- I also conducted surveys, so it's not just 20 relying on information.
- 21 Q. And I would -- I didn't mean to exclude your surveys.
- provided and the work that you do, that's what you rely upon,

And the work that you did -- the information that you're

- 24 | correct?
- 25 A. Correct.

- 1 \parallel Q. But your work can only be as good as the -- the inputs,
- 2 | the information that you're given, right?
- 3 | A. Or collected, yes. I broadly agree. Collected or
- 4 given, yes.
- 5 | Q. And you've got reports that span, with attachments and
- 6 | all their surveys, hundreds of pages, don't you?
- 7 A. You mean my personal reports?
- $8 \parallel Q$. Yes, sir.
- 9 A. Yes, sir.
- 10 Q. You did a lot of work in this case.
- 11 A. Yes.
- 12 | Q. And you cited all the material that you reviewed in
- 13 | formulating your reports, didn't you?
- 14 A. Yes, sir.
- 15 \parallel Q. You're required to do that, right? You have to give us
- $16 \parallel$ a list of everything that you reviewed or that you relied
- 17 upon in formulating your opinions.
- 18 A. That's correct, sir.
- 19 Q. And isn't it true that prior to writing your opening
- 20 | report, that Apple did not provide you with a single survey
- 21 | that it had conducted?
- 22 A. That is correct.
- 23 Q. It was only after you saw Mr. Mills' deposition where he
- 24 | was referencing Apple's surveys that you thought maybe you
- 25 ∥ ought to look at them, right?

A. That is correct.

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- Q. So up until reviewing Mr. Mills' deposition, you didn't even know that Apple had surveys, did you, sir?
 - A. Not specifically to this case matter, that's correct.
- Q. You subsequently discovered, after Mr. Mills gave his deposition, that there were, in fact, surveys, right?
- 7 A. That's correct.
- Q. And you're not here to give the jury any opinion as to whether or not Apple's own surveys or -- are reliable or not reliable?
- 11 A. It's not in my report, so that's, I assume, what you 12 mean, that I cannot give my opinion on that?
- 13 | Q. Right.
- 14 | A. Okay.
- Q. You haven't given us a written report that says, I'm critical of Apple's surveys, have you?
- 17 \parallel A. That is correct.
- 18 Q. Would you have liked to have seen those surveys before
 19 you started writing your reports, Dr. Dhar?
- A. It wasn't relevant to my opinion. As you recall, my opinion was on Dr. Wecker's surveys, and Dr. Wecker had not seen it, so my -- whenever I do my report, I like to see everything Dr. Wecker had referred to in his document, and he had not referred to any Apple surveys.
- 25 Q. So you didn't care what the company that you were

- working for had with respect to surveys that measured
 consumers' appetite for the features that are accused of
- 3 | infringement here?
- 4 A. It wasn't relevant to my task, which was to see whether
- 5 Dr. Wecker's surveys were scientifically done.
- 6 Q. It wasn't relevant to your task because you weren't
- 7 asked to measure in any way whether or not these features
- 8 drove demand for these products, were you?
- 9 A. I was not asked to do that.
- 10 | Q. You certainly never spoke to anyone at Apple about their
- 11 market research prior to writing your report.
- 12 A. That's correct.
- 13 Q. You think Apple knows how to conduct surveys?
- 14 A. I think so. Like every large company, they have surveys
- 15 \parallel that they do.
- 16 \parallel Q. Would you agree with me that all things being equal,
- 17 | that you would have preferred that Apple had at least
- 18 provided you with survey information that goes to whether or
- 19 | not folks are buying their products as a result of the
- 20 | functionality that we accuse of infringement?
- 21 | A. Again, it wasn't relevant to my task, which was to see
- 22 | whether Dr. Wecker's surveys were reliably done.
- 23 Q. Do you think full access to information is important in
- 24 ∥ lawsuits?
- 25 | A. I -- sure. I think more information in general cannot

- 1 | hurt. I don't have any concern with that.
- Q. If you're shielded from information, that can make your
- 3 | job more difficult, generally speaking.
- 4 A. Well, it's very generally speaking. As I said, more
- 5 | information could be better, yes.
- 6 Q. Whether it's surveys or shielding fact witnesses, access
- 7 | is important, isn't it?
- 8 A. Again, I don't know the legal -- I can just speak as a
- 9 | judgment and decision-making expert. More information cannot
- 10 be -- a disclosure is not a concern, as I see. It's good.
- 11 | Q. What's an event study, Dr. Dhar?
- 12 A. Sorry. I didn't hear you.
- 13 Q. An event study.
- 14 | A. Oh, sure.
- An event study is a statistical study to show what
- 16 happens -- to understand if a certain event has an effect.
- So, for example, if you split a stock, the same stock
- 18 | goes from \$50 to, let's say two for one, \$25, and you want to
- 19 understand, does that change how people -- are they more
- 20 willing to buy and so forth. So that would be an example of
- 21 an event study.
- 22 | 0. And would you agree with me that if you had the
- 23 | information such that you could look at a device, let's say
- 24 | an iPhone, at a point in time, and then you have an event
- 25 occur, and you look at sales after that event occurred, then

- you might be able to draw some conclusion about whether or not that event had an impact upon the sale of an iPhone.
 - A. Broadly speaking, that's correct. It depends on the event, how broad it is and what's changing in that event,
- 5 yeah.

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- Q. You've -- you've been involved in event studies, haven't
 you?
- 8 A. For my academic work, not for my consulting. But yes.
- 9 Q. Did you review any documents, when you were taking a
 10 look at Dr. Wecker's surveys, to evaluate whether or not
 11 there was an event with sales before and after it, that might
 12 either support or undermine Dr. Wecker's opinions?
- 13 A. I did not. It was not the purpose of my report.
- Q. You weren't able to see documents that were produced by Samsung, were you?
- 16 A. Did you -- documents produced by Samsung, no, I did not.
 - Q. All right. I've got an excerpt from PX 96, and it's a confidential document, but I've excised all the confidential information.
- 20 Have you ever seen this document before?
 - A. It doesn't look familiar to me.
 - Q. You see there where -- I'll represent to you that this comes from Samsung. It says: The App Store launch in 2008 had a direct contribution of 42 percent unit share lift to Apple.

Then it talks about stickiness, and then it talks about the importance of apps. 55 percent of mobile phone users say that apps impact their purchase decision.

Do you see those things?

A. Yes.

- Q. Looking at the upper left-hand corner about the App Store launch in 2008 had a direct contribution of 42 percent unit share lift to Apple, is that not an event that you could look at and determine the value of the patented technology in this case?
- A. No. It's much more complicated than that, because the event needs to be isolated. So, for example, any new launch is accompanied with a lot more advertising. A new launch might be at the time of Christmas season when there's a lot of sales.

So one would have to do a very detailed study to see what it is. But the data is much more granular than what you're presenting to me to make that judgment.

- 19 Q. Of course, you'd never seen this document, I guess, 20 prior to right now?
 - A. Correct.
- Q. Did Apple give you any information about what impact launching an impact -- launching the App Store had upon its sales of iPhones?
 - A. They did not. That was not the purpose of my report.

- Q. Your purpose was not to figure out the value of this technology, was it?
 - A. Correct. It was not, no.
- 4 MR. WARD: All right. You can take that down.
- Q. (By Mr. Ward) And even though it wasn't your job to
 perform surveys and try and get to the heart of the issue in
 this case, you do have the expertise to do that, don't you,
- 8 Dr. Dhar?

- 9 A. Generally speaking, yes.
- 10 Q. But you don't have an opinion as to whether or not you could do it in this case, right?
- 12 A. That's right, because of the timing I mentioned. It was
- 13 2009. We're talking 2014 and '15. And I understand that Dr.
- 14 Becker, who the jury will hear from next, has done some
- 15 analysis of the value of the feature.
- Q. Do you know whether or not Apple has surveys that go
- 17 | back to 2009?
- 18 A. I would -- yes, I think they do. I saw some surveys
- 19 | from 2009.
- 20 Q. But, again, since Apple didn't ask you to do anything to
- 21 | assist the jury in determining the value of this technology,
- 22 | that's not something you asked for or that you thought would
- 23 be appropriate in presenting your opinions here. Would that
- 24 | be fair to say?
- 25 | A. That was -- that's right. I did not look at it before

- 1 | writing my report, correct.
- 2 | Q. Apple didn't ask you to perform any survey for
- 3 Dr. Becker, right?
- 4 A. I didn't hear the question.
- 5 | Q. Apple did not request that you perform a survey that Dr.
- 6 | Becker could rely upon?
- 7 A. Oh, correct. No, they did not.
- 8 Q. You did perform a couple of surveys, though, right?
- 9 A. Yes.
- 10 | Q. At a cost of \$150,000 per survey.
- 11 A. That was my approximate guess. I don't know how much I
- 12 | charged. But based on my past experience, I think it costs
- 13 | that much.
- 14 | Q. So for two surveys, we're talking \$300,000?
- 15 A. Correct.
- 16 \parallel Q. Not to determine value but to determine that
- 17 Dr. Wecker's surveys were no good.
- 18 A. Correct.
- 19 | Q. During your direct examination by Mr. Albritton, do you
- 20 | recall some questions about whether or not you or someone
- 21 working directly for you drafted each and every one of the
- 22 | questions that you use in your surveys?
- 23 A. Yes, I do.
- 24 Q. And I think it was your testimony that you draft them
- 25 | all.

- A. Yes.
- 2 Q. Or someone at your direction.
- 3 A. Correct.
- Q. You then were asked whether you had ever conducted a survey where somebody just merely gave you a description to use in your survey question.
- 7 Do you remember that?
 - A. Yes, I do.

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- Q. You weren't intending to suggest that Dr. Wecker had just been given questions to ask, and he stuck them in his survey and asked them, were you?
- A. Well, I wasn't suggesting anything at that point, but
 there was -- you know, the lawyers talking. My -- but my
 recollection of what Dr. Wecker said in his deposition was
 that there was some questions that he was given by Dr. Jones
- Q. Let's -- let's look at what you were asked, because that was lawyer talking, asking you questions, right?
- 19 | A. Sure.

and counsel.

- 20 MR. WARD: Let's look at the transcript from the 21 19th, Page 136, Lines 1 through 18.
- Q. (By Mr. Ward) And so this is Mr. Albritton last Thursday asking you questions, right?
- 24 A. Yes.
- 25 Q. And so if you -- if you get down to Line 10,

Mr. Albritton asked: Dr. Dhar, have you ever conducted a survey where somebody just merely gave you a description to use in a survey question?

And you answered: I have not.

Now, I think you answered this. You said that was lawyer talking, not your answer, right?

- A. No. I thought you were referring to his question.

 That's my answer. I have not, yeah.
- 9 Q. Right. I understand that's your -- your answer, but did
 10 you mean to imply or were you trying to leave the impression
 11 with the jury that Dr. Wecker had simply been given questions
 12 that he didn't have any input on, and he just stuck them in
 13 his survey because he was told to?
 - A. Maybe I misread what Dr. Wecker's testimony was, whether he was -- in his deposition, I got the same -- that some of the questions, he did precisely what you are suggesting.
- Q. Would it be helpful to look at what his testimony was here in the courtroom?
- A. No. I said from his deposition. I think it was a little different than his courtroom testimony here.
- Q. All right. Well, let's look at what he said in the courtroom.
- 23 A. Okay.

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Q. You understand that that's the reason you have a deposition so that if you think someone gives inconsistent

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testimony in the courtroom, you get to confront them and challenge their answer. You understand that, right? Α. T do now. Okay. Let's look at the testimony that Mr. Wecker --Dr. Wecker gave on the 17th. MR. WARD: Page 62, Line 5 to 18. (By Mr. Ward) And he was asked -- he's talking about the Ο. preamble to one of his questions. Dr. Jones assisted you with coming up with that preamble? He said: Exactly. And then who assigned (sic) you with coming up with the question that you've got highlighted? He said: Well, I wrote that. Did Mr. Mills have any hand in that? And then do you see his answer where he says: a collaborative effort. There'd be conference calls, and I'd listen to them, and they'd listen to me; but eventually, because I'm doing the survey, I get the last word. So when it comes down to finalizing this, that's me. That's what he testified to here in court, correct? Yes, he did. Α. Do we need to keep going to see if he was confronted with the deposition where he did something inconsistent or

- 1 | said something inconsistent?
- 2 A. No. I think that's okay. I think I agree with you that
- 3 here he says he had a hand in it.
- 4 | Q. Okay. Now, you're not critical of him talking to Dr.
- 5 | Jones and Mr. Mills in assistance in formulating these
- 6 | questions, are you?
- $7 \parallel A$. Not at all.
- 8 Q. And you yourself had to talk to Mr. Wechselberger about
- 9 some of these questions, as to whether or not they captured
- 10 more than what was simply accused -- or what was caught by
- 11 | the claim, right?
- 12 A. That's correct.
- 13 | Q. Because these are complex claims, correct?
- 14 \parallel A. That's correct. I'm not a technical expert.
- 15 MR. WARD: Let's look at PX 205.002-6.
- 16 | Q. (By Mr. Ward) You recognize this question from
- 17 Dr. Wecker's survey, don't you?
- 18 A. Yes, I do.
- 19 Q. You asked the same question in your survey?
- 20 | A. Yes.
- 21 | Q. I believe you told us that Mr. Wechselberger told you
- 22 | that this question captured more than what's covered by the
- 23 claims in the lawsuit; is that right?
- 24 | A. That's correct, yes.
- 25 | Q. That's what he told you.

- A. I relied on him, yes.
- 2 | Q. And is that the same Mr. Wechselberger who didn't know
- 3 what the burden of proof is for proving invalidity in this
- 4 | case?
- 5 A. I wasn't here for his entire testimony, but if you
- 6 | say -- represent that, I'll take it.
- 7 | Q. I'll represent to you that he did not know what the
- 8 | burden of proof was for invalidity.
- 9 | A. Okay.
- 10 | Q. Does that cause you to question whether or not you
- 11 should be relying upon this gentleman as an expert in patents
- 12 | if he doesn't know what the burden of proof is for
- 13 | invalidity?
- 14 A. No. That's very standard to rely on that. Obviously,
- 15 \parallel if he's incorrect, then the jury can take that into account.
- 16 \parallel But I don't have any independent opinion on that. I have to
- 17 | rely on the Defendant's plaintiff -- technical expert.
- 18 Q. You don't get to choose them, do you?
- 19 A. I don't get to choose them.
- 20 | Q. They're kind of given to you, and you're stuck with what
- 21 you've been given, right?
- 22 A. That's correct.
- 23 Q. Kind of like those Apple surveys, right? You either get
- 24 | them, or you don't get them. It's not up to you.
- 25 A. It is up to me -- if Dr. Wecker had referred to it in

- his report. He did not. So I asked for all the documents that are referred to in Dr. Wecker's report.
- Q. Well, you've testified that Mr. Wechselberger told you that this question was too broad, and it captured things outside of the claim, right?
 - A. Broadly speaking, yes.

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- Q. All right. Tell us what's captured that's outside of the claims.
- A. So, again, I'm not a technical expert, but my understanding is that the claim is something around the manner of payment and downloading; whereas, this leads -- this is generally about the capability to purchase apps, and you can purchase apps in other potential ways that may be non-infringing.
 - Q. You understand that Apple hasn't identified any non-infringing alternative to the way that's described in the patents in this case.

18 Do you know that?

- A. Well, that's correct.
- Q. So what is the non-infringing manner of downloading apps that you're aware of?
- A. The one is that -- that I think your expert -- you know,
 Dr. Jones mentioned. So that would be one way to purchase
 apps without infringing the patent.
- 25 Q. So that's the only one you're aware of, the one that Dr.

Jones came up with?

- 2 A. And there was some discussion in the courtroom around,
- 3 you know, first downloading and then paying for it would
- 4 | be -- I think Dr. Jones said would also be non-infringing. I
- 5 don't know if it's different from what he did or it's
- 6 | slightly similar, but that would be another one I heard.
- 7 Q. Well, I think we'll hear from Dr. Jones, and we can ask
- 8 | him that. Do you agree he might be the best person to ask?
- $9 \parallel A$. I agree.
- 10 \parallel Q. Would you agree with me that when a product, like a
- 11 | smartphone, has dozens of features -- or I think you said
- 12 | hundreds of features the other day -- that the consumer
- 13 doesn't consider all those many, many features when they're
- 14 | making a decision to purchase the device, do they?
- 15 A. That's correct, yeah.
- 16 \parallel Q. They consider a -- a few of those features when making
- 17 | that decision, don't they?
- 18 A. Largely speaking, correct, yes.
- 19 Q. And you've now seen Apple surveys, I believe, that show
- 20 | that Apple also knows the main reasons why people are buying
- 21 | their devices, haven't you?
- $22 \parallel A$. They have identified several main reasons, yes.
- 23 | Q. And, again, you hadn't seen those when you offered your
- 24 | first criticism of Dr. Wecker?
- 25 A. Correct.

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apps.

MR. WARD: Let's look at Plaintiffs' Exhibit 103.28-1242. We'll blow up that top left. (By Mr. Ward) You've seen this document during trial, Ο. haven't you? Yes, I have. Α. And so Apple is saying: What are the main reasons, consumers, that you purchase your iPhones? And these are the responses they're getting. Yes, that's correct. Regardless of what you think of Dr. Wecker's surveys, would you agree with me that his survey results are much more in line with Apple's surveys than anything that you've provided to the jury? Don't know what you mean by "in line," because that's a very different question. Wanted to use apps is not what is the infringing feature here. It just means he wanted to use apps. And my understanding is Dr. Wecker is trying to understand the value of the infringing feature, which is around a method of payment for purchasing apps, which is, to my understanding, much more narrower than wanting to use

Q. You don't think that the claims in this case cover

selecting an app and downloading it to your phone?

- A. I think they do.
- 2 | Q. Okay. And the first category there, that also
- 3 | encompasses downloading games and -- and you know what comes
- 4 | after "and" is "apps," don't you?
- 5 A. Yes, I think so. You're right, yes.
- 6 Q. All right. So --
- 7 | A. Oh, is there a question? I didn't --
- 8 | Q. I'm coming. I'm a little slow.
- 9 Two of the top three here that Apple is asking questions
- 10 about deal with purchasing and downloading games and apps,
- 11 | correct?
- 12 A. Correct in the sense -- using apps and combining
- 13 | features, correct.
- 14 | Q. And, again, since Apple never provided you with any of
- 15 ∥ their surveys, you've never given us a report on them, have
- 16 you?
- 17 | A. That's correct.
- 18 | Q. And you're not here to provide any criticism to the jury
- 19 of Apple's surveys, are you?
- 20 | A. Not specifically. I don't know if I'm asked a question,
- 21 but not otherwise.
- 22 | 0. Would you agree with me that no survey is perfect?
- 23 A. Yes, that's true.
- 24 | Q. And because no survey is perfect, criticism can be
- 25 offered about every survey.

- 1 A. That's true, too, but there are bad surveys, just to
- 2 | clarify. Just because there's no perfect survey doesn't mean
- 3 | that there are not bad surveys.
- $4 \parallel Q$. Those are your words, aren't they? No survey is
- 5 perfect. Criticism can be offered about every survey.
- 6 A. Yes, that -- that's correct.
- 7 | Q. One of your criticisms of Dr. Wecker's surveys is his
- 8 use of the direct elicitation method, correct?
- 9 A. Yes.
- 10 | Q. And that means direct questioning.
- 11 A. Correct.
- 12 \parallel Q. Would you agree with this statement, quote: It is
- 13 | fundamental to good survey design to ask respondents a
- 14 precise question that is relevant to a question of interest,
- 15 closed quote.
- 16 | A. I would agree with that.
- 17 | Q. That's your statement, isn't it?
- 18 | A. Yes, it is.
- 19 | Q. From the USA v. H&R Block case?
- 20 \parallel A. If you say so. I don't remember, but that's a
- 21 perfectly -- yeah, I agree with that statement, yeah.
- 22 | Q. And despite your criticism of Dr. Wecker's method of
- 23 propounding questions, you used the exact same method when
- 24 you conducted your survey, didn't you?
- 25 | A. I wouldn't say the same method, because it depends on

- the same case, but I have direct questions, if that's what 1 you mean by saying that. 2
- 3 Word-for-word for Question 4A, for example, when you 4 asked word-for-word the same question that Dr. Wecker asked,
- 5 didn't you?
- 6 Oh, excuse me. You mentioned my survey. Yes, that's 7 correct.
- You didn't propound a different question that would, as 8 9 you say, capture what was actually claimed in the patents, 10 right?
- 11 Α. I did not.
- Or what you claim is claimed in the patents? 12
- 13 That's correct, my understanding of it. Α.
- You didn't propound a different -- a different question 14 15 that would describe some non-infringing alternative that the survey respondent then would read and respond to?
- 17 That's correct. Α.

- Same non-infringing alternative that Dr. Wecker 18 19 presented in his surveys.
- 20 Α. That's correct.
- 21 Okay. You're not here to tell us how to do it; you're
- 22 here to tell us how not to do it essentially, right?
- Or the way it was done, why it's not reliable, correct. 23
- 24 You also criticize Dr. Wecker -- or initially, you 25 criticized Dr. Wecker's use of regular users versus all

buyers, correct?

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- A. Yes, that's correct.
- Q. Would it be fair to say that you've backed off that
- 4 criticism, and you don't have any further criticism of his
- 5 use of regular users versus purchases?
- 6 A. That's correct. In subsequent surveys, he used both.
 - Q. And there wasn't much different, was there?
- 8 A. There was not much difference is correct.
- 9 MR. WARD: In fact, let's look at Slide 16 from Dr.
- 10 Wecker.
- 11 | Q. (By Mr. Ward) You backed off of that criticism, because
- 12 | if he had used recent purchasers instead of regular users,
- 13 the damage number would have gone up, right?
- 14 A. Based on this number, that's correct.
- 15 \parallel Q. Is that why you backed off of the criticism of his use
- 16 \parallel of using the percent of regular users, because it was -- that
- 17 | was going to be worse for Apple if he followed your criticism
- 18 | and used purchasers?
- 19 A. No. I don't care if it was Apple. I did because (A) he
- 20 | hadn't done it first, so it's good he did it, and (B) the
- 21 | numbers are very similar. So I didn't -- it was not a strong
- 22 point.
- 23 MR. WARD: You can take that down.
- 24 Q. (By Mr. Ward) Another criticism that you had of
- 25 Dr. Wecker was his use of the word motivate in the first

- survey that he conducted, right?
- A. The first survey, the original survey, correct.
- Q. And you said that using motivate could mean that a respondent wouldn't know whether they were responding they were a little motivated, somewhat motivated, very motivated,
- 6 or extremely motivated, right?
 - A. Right, whether it was a major motivation or not. And he was also using it differently in the first survey.
- 9 MR. WARD: Mr. Lee, could you give me the camera?

 10 Thank you. There we go.
- Q. (By Mr. Ward) So we've got the word motivate here. I'm going to put over on the left: A little motivated, somewhat, very motivated.
- 14 Can you read that?
- 15 A. Yes, I can.
- 16 Q. And then extremely motivated.
- 17 And I'll refer to that as our motivate continuum.
- 18 Does that make sense?
- 19 | A. Sure.
- Q. Do you agree with me, as we get out here further to the right, we're getting out to the only reason that motivates
- 22 you?

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- 23 Would that be fair?
- A. That would not be fair, because there can be many extremely motivating reasons.

- 1 Q. And I'm moving out further out than extremely. So it's
- 2 | further out the continuum. It's to the end. It's the only
- 3 | reason.
- 4 A. If it's the only reason, by definition, I agree with
- 5 you.
- 6 Q. All right. We'll call that the end.
- 7 | A. Okay.
- 8 | Q. I'll move my arrow there. Is that more accurate?
- 9 A. Yes.
- 10 Q. Now, originally, you had some criticism of Dr. Wecker's
- 11 | use of the word motivate, right?
- 12 | A. Yes.
- 13 Q. Because they might understand it as one reason as
- 14 poposed to the only reason or even a major reason.
- 15 \parallel A. That's correct. In fact, my opinion is that they would
- 16 | not understand it to mean the only reason, but it
- 17 | most like -- most people would understand it to mean a
- 18 | reason. But I gave him the benefit of the doubt.
- 19 | Q. And what is the -- where does major reason fall on
- 20 | the -- the continuum I've got here?
- 21 | A. So in your continuum, it would be -- major reason
- 22 | means -- again, I want to be careful. One of the major
- 23 | reasons would be anywhere around -- after "very" could be a
- 24 major reason.
- 25 Q. Okay. So maybe from "very" on up to "only," right?

- 1 Would that be fair?
- 2 A. That would be fair, I think.
- $3 \parallel Q$. Would you agree that major reason might be synonymous
- 4 | with main reason?
- 5 A. Yes. Sorry. Did you say would be they synonymous?
- 6 Yes, I think so.
- 7 Q. Okay. So we can say major or main?
- 8 | A. Yes.
- 9 Q. And when you criticized Dr. Wecker's use of the word
- 10 | motivate, he ran some more surveys, didn't he?
- 11 A. That's correct.
- 12 | Q. And he added the word alone.
- 13 A. Correct.
- 14 | Q. So he -- instead of just using motivate, he added alone
- 15 | motivate to try and capture "only reason." Would you agree
- 16 | with that?
- 17 \parallel A. That's what he tried to do, but he did it incorrectly,
- 18 yes. But that's what he was trying to do.
- 19 \parallel Q. He was responding to that criticism in part, right?
- 20 | A. Yes, he would. But I have a survey to show that that's
- 21 | not how people interpret it.
- 22 | Q. So previously in your first criticism, you said motivate
- 23 wouldn't be understood by someone taking the survey as to
- 24 | whether it was a reason or the only reason, right?
- 25 \parallel A. I -- I think I said it would be closer to a reason, and

- it would not be taken as the only reason.
- Q. It wasn't criticism of the word motivate in the first criticism you offered?
 - A. That's -- that's correct, yeah.

- Q. But then when he added the word alone motivate, you then criticized him for using the word motivate, right?
- A. Well, I said it would be ambiguous in terms of the way people took it to mean. I think people use the word motivate as a reason, basically, is the way I look at it, broadly speaking.
- MR. WARD: Let's look at what you said in your report on -- from January 21st, 2015, Page 11 -- Paragraph 24.
 - Q. (By Mr. Ward) And you can just read along with me here, Dr. Dhar.
 - Dr. Wecker states that the purpose of the alone motivate to buy question is to provide additional survey evidence that the patented features alone motivated survey respondents to purchase the accused devices.

However, the word motivate is not a word commonly used in surveys. In fact, in over 250 surveys that I have conducted or supervised and more than a thousand surveys that I have reviewed, I have never previously encountered a survey that uses the word motivate to elicit responses about purchase decisions.

- Is that what you wrote in your report?
- 2 A. Yes.

- Q. So you'd never use that word motivate, would you?
- $4 \parallel A$. Yes. I prefer to use the word reason, basically.
- Q. You think it's silly to use a question in a survey that
- 6 says are you motivated for a reason to buy something?
- 7 A. Are you motivated -- I think of motivation as a reason,
- 8 so I would -- I said what are the reasons he would buy
- 9 something?
- 10 | Q. And you were critical of Dr. Wecker using the word --
- 11 when you criticized him the second time, you said he
- 12 shouldn't be using that word motivate because you've never
- 13 used it and you've never seen it used, right?
- 14 A. Well, again, I was going back to the first report where
- 15 | it could be different degrees of motivation.
- 16 Q. Of course, you were going back to that report before
- 17 | you'd seen Apple's survey that the jury has now seen where
- 18 | they use the word motivate, right?
- 19 A. Correct.
- 20 | Q. When you wrote that, you hadn't seen Apple's surveys
- 21 | using the word motivate, had you?
- 22 A. That's -- that's correct.
- 23 MR. WARD: Let's look at that, at Plaintiffs'
- 24 | Exhibit 756, Page 16.
- 25 | Q. (By Mr. Ward) Did you see this document for the first

- 1 | time when you were in Court?
 - A. That's correct.
- Q. And you see Apple using the question, what motivated you
- 4 | to purchase an iTunes gift card for yourself?
- 5 | A. I do.

- 6 Q. Would you have preferred to have seen that document
- 7 before you wrote your report and said how you should never
- 8 | use the word motivate?
- 9 A. No. As I said, people interpreting as reasons to do --
- 10 what reasons to do purchase. I prefer to use the word
- 11 | reasons because motivation in psychology has a very specific
- 12 meaning, so I prefer to use reasons, but that's how the
- 13 surveys are using it.
- 14 | Q. And so did I understand your answer correctly to be, no,
- 15 | I didn't want to see that document before I committed myself
- 16 \parallel in the report saying that you should never use the word
- 17 | motivate? Do I understand your answer correctly?
- 18 | A. I said I have never used it, and I had not seen surveys
- 19 | that used it.
- 20 MR. WARD: Objection, nonresponsive.
- 21 THE COURT: Sustained.
- 22 | A. Sorry, please repeat the question.
- 23 Q. (By Mr. Ward) Right. Is your answer to my question
- 24 | that it did not matter to you that Apple had not shown you
- 25 | this document, that you didn't need to see it before you

issued your report?

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- A. That's right, did not affect my opinion.
- Q. And that you wouldn't have preferred to have seen it before you issued your report?
- 5 A. It wasn't relevant to my task.
- Q. Now, another criticism that you have of Dr. Wecker was that he didn't ask questions about a large number of other features that could have motivated someone to buy an iPhone or an iPod Touch or an iPad, right?
- 10 A. When he asked the alone motivation question, correct, 11 yeah.
 - Q. But didn't we just agree earlier that there's just a few features that drive someone's decision to purchase a product with hundreds of features?
 - A. But that doesn't mean there are few motivations. What I mean is when you buy between two phones, there are few features of which you decide.
 - So, for example, if I buy an iPhone 6, I will decide based on a few features, how big is the screen or something else, but the phone still has other features like making calls that would be motivations.
 - So people decide between products between -- with a subset of the features; but when you buy a category, you have other features you can consider.
 - Q. So when you go buy a phone, are you motivated to buy the

- 1 phone -- a smartphone because it makes phone calls?
- 2 A. Yes. That's the way that Dr. Wecker asked the question
- 3 because I asked him if people said yes to it and --
- 4 | Q. And that was one of the things that you included in --
- 5 | in your criticism of Dr. Wecker is that these folks might
- 6 have been motivated to buy a phone to make phone calls and
- 7 | not just motivated to buy the phone because they could
- 8 download and purchase apps, right?
- 9 A. That's correct, yeah.
- 10 | Q. That was shocking to you that someone might be motivated
- 11 | to buy a phone call to make phone calls?
- 12 \parallel A. No, not at all. I expected that -- that people, when
- 13 you test it, they would say these are also reasons to also
- 14 | buy the phone.
- 15 \parallel Q. You don't think that the ability to make a phone call on
- 16 | a phone is something that's expected and factored into every
- 17 phone when you go to the store, and it's not something that
- 18 | motivates you?
- 19 A. It's factored as much as purchasing apps is because most
- 20 | phones have that, as well now.
- 21 | Q. Most phones have the ability to download and purchase
- 22 | apps?
- 23 A. Correct, yeah.
- 24 \parallel Q. Does that mean that they don't infringe these patents?
- 25 A. No, I'm not -- I'm just saying to the point that people

- consider both unique and common features when buying in the category, but people focus only on unique features when
- 3 buying between brands between products.
- 4 Q. Their decision is made by looking at one of just a few
- 5 | features, right?
- 6 A. Subset. I -- I don't know how many. It could be, you
- 7 | know, half a dozen at best, yeah.
- 8 0. Half a dozen?
- 9 A. Yes.
- 10 MR. WARD: All right. Let's look at Plaintiffs'
- 11 | Exhibit 103.28 at Page 1166.
- 12 Q. (By Mr. Ward) Have you seen this page from the Apple
- 13 | survey before you came to Court?
- 14 A. I don't remember specifically. I've seen some --
- 15 | several of these surveys.
- 16 \parallel Q. But you understand that Apple is saying that while many
- 17 | features are important in the purchase decision, web
- 18 | capabilities, ease of use, and apps are rated highest?
- 19 A. That's what it says, yes.
- 20 | Q. You did not limit your survey where you went and asked
- 21 questions beyond the alone motivate to just a few features,
- 22 | right?
- 23 A. That's correct, because different people will have
- 24 | different subsets, sir.
- 25 MR. WARD: All right. Let's go back to Plaintiffs'

- Exhibit 103.28, Page 1242, and focus in on that left column -- I'm sorry -- with the percentages.
- Q. (By Mr. Ward) So we know Apple is asking questions of its buyers about what the main reason for purchase is, right?
- 5 A. Correct.
- Q. And you agreed with me earlier that main is out here on our continuum --
- 8 MR. WARD: Let me switch to the document camera,
 9 Mr. Lee. Thank you.
- Q. (By Mr. Ward) Main, which Apple is surveying, is moving out here to the upper end of our motivation continuum, isn't it?
- 13 A. So one of the main reasons, that's correct, yeah.
- 14 | Q. Did Apple tell you --

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- MR. WARD: And I'm through with the document

 camera. We can go back to 1242, and I'm almost finished.

 And let's just look at the entire document.
- Q. (By Mr. Ward) Before you issued your report, did Apple tell you about the fact that they run surveys all around the

world in all these different countries?

- A. Not specific -- before my opening report, I think you're referring to. No, I -- we did not have a discussion of that.
- Q. Did they tell you whether or not they tried to figure out what value of this -- this technology might have by running their open internal survey, whether it was in the

- U.S. or in another country?
- 2 A. They did not.

- $3 \parallel Q$. Do they have the expertise to do that, Dr. Dhar?
- 4 | A. I don't know the answer to that.
- 5 \ Q. But you do, right, you've got the expertise?
- 6 A. Generally speaking, yes.
- 7 | Q. You just weren't asked to do it, right?
- 8 A. That is correct.
- 9 Q. Have you ever heard the saying that it takes a carpenter
- 10 | to build a barn?
- 11 A. I can figure it out, but I hadn't heard that.
- 12 | Q. Have you ever had to build a barn or a structure or
- 13 | anything like that?
- 14 | A. Sorry?
- 15 | Q. Have you ever built a barn or any type of structure
- 16 | where you got to get out there and pour a foundation, set
- 17 poles, make sure everything is level, put a roof on it, walls
- 18 | on it?
- 19 A. Not a big construction guy, but I've done small things,
- 20 | yeah.
- 21 | Q. All right. That can be hard work, can't it?
- 22 A. Yes.
- 23 Q. Doesn't take any skill to tear it down, though, does it?
- 24 | A. I would -- I would disagree with that.
- 25 MR. WARD: Pass the witness.

1 THE COURT: Redirect? 2 MR. ALBRITTON: Thank you. May it please the 3 Court. 4 THE COURT: Proceed. 5 REDIRECT EXAMINATION 6 BY MR. ALBRITTON: 7 Dr. Dhar, we just heard questions about building a barn and that takes no skill to tear it down. Do you remember 8 9 those questions? 10 Α. Yes. 11 Was there skill involved in the surveys that you ran that exposed the flaws and the biases in Dr. Wecker's survey? 12 13 In my opinion, yes, sir. Α. 14 MR. ALBRITTON: If you would, Mr. Lee, let's bring 15 up Apple's -- Plaintiffs' Exhibit 103.028-1242? 16 (By Mr. Albritton) And while you're bringing that up, 17 Dr. Dhar, do you believe that you've used and relied on your 18 skills in offering these opinions to assist this jury? 19 Α. Yes. 20 All right. Dr. Dhar, Mr. Ward asked you about this, 21 okay? And I want to ask you a -- a question. Does this show 22 that people are alone motivated or that it is the only 23 reason -- that apps are the only reason that they buy

25 A. It does not.

iPhones?

- O. What does it show?
- 2 A. Well, the question asked for up to three reasons, and it
- 3 shows that people have multiple reasons to buy an iPhone.
- 4 | Q. So, in your opinion, does this support the notion that
- 5 | people buy iPhones solely for the capability to purchase
- 6 apps?
- 7 | A. It does not.
- Q. Do you have data that shows -- scientific data thatshows people do not buy iPhones solely --
- 10 MR. WARD: I'm going to object to leading.
- 11 THE COURT: Sustained as to leading.
- 12 MR. ALBRITTON: Okay.
- 13 Q. (By Mr. Albritton) What does your data show, Dr. Dhar?
- 14 | A. Well, I discussed the survey that I did on Thursday
- 15 | which showed that people had many more reasons that they said
- 16 \parallel they were motivated to purchase the different devices.
- 17 MR. ALBRITTON: Mr. Lee, can we bring up
- 18 | Plaintiffs' Exhibit -- it's the one Mr. Ward showed. It's
- 20 \parallel it's at Page 10. It's the one that Mr. Ward just showed.
- 21 Okay. Can I get -- can I get you to bring that up
- 22 | for me, please, sir?
- 23 Q. (By Mr. Albritton) All right. Can you see that, Dr.
- 24 | Dhar?
- 25 | A. Yes, I can.

- Q. This is a survey Apple did that talks about what motivated you to purchase an iTunes gift card for yourself.
 - A. Yes, sir.

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- Q. Does that have anything to do with the purchasing of apps?
- 6 THE COURT: Speak up, Mr. Albritton.
 - Q. (By Mr. Albritton) Does that survey, as you look at it, does it have anything to do with the capability of purchasing apps?
- 10 A. It does not.
- Q. Does anything in that survey ask about what is the only or sole reason for purchasing a gift card?
- A. I don't have all the details how it was done. The
 question says -- I don't know that they had -- oh, it says
 main and secondary reasons, so it asked them for different
 reasons then.
 - MR. ALBRITTON: Yeah, if you would, please, sir, highlight there on the left -- I'm sorry, the left where it says I like to control my spending, it was convenient, that column. Can you pull that out, please, sir? Thank you.
- Q. (By Mr. Albritton) Now, Dr. Dhar, what does that tell you about whether this survey was asking about the only reason for purchasing a gift card?
- A. I think it was -- the survey was asking about different reasons for purchasing a gift card or different motivations,

if you like.

- $2 \parallel Q$. The -- the -- does it ask about the only motivation?
- 3 A. Not the way I read it.
- 4 | Q. Okay. Dr. Dhar, there was some discussion -- Mr. Ward
- 5 | asked you about a bad survey. Is there any empirical data in
- 6 | this case that shows that the survey questions relied upon by
- 7 | the Plaintiffs in this case were bad questions and that the
- 8 results are bad?
- 9 A. So I don't know what bad means, but my sort of two
- 10 | surveys that I did shows that they're not reliable in terms
- 11 of the measures of value to Apple from the features.
- 12 | Q. Mr. Ward asked you if you used one of the exact
- 13 | questions from Dr. Wecker's survey -- I believe it was
- 14 | Question 4a?
- 15 A. Yes.
- 16 Q. Why did you replicate Dr. Wecker's survey questions?
- 17 A. Well, there was a purpose, as I mentioned, Thursday,
- 18 setting aside all the flaws, I think in the methodology, I
- 19 wanted to show that the question itself, if you isolate the
- ||20|| problem with the question, the wording of the question, so I
- 21 | didn't want to change anything because if I did, then they
- 22 | would tell me, hey, you changed all these things and you
- 23 actually...
- 24 \parallel Q. Why did you ask direct questions in your surveys in this
- 25 case, Dr. Dhar?

1 A. Because I was trying to do what Dr. Wecker did, yeah.

MR. ALBRITTON: Pass the witness, Your Honor.

THE COURT: Further cross-examination.

RECROSS-EXAMINATION

BY MR. WARD:

- 6 Q. Dr. Dhar, you understand the reason we are looking at
- 7 | the survey relating to the iTunes gift card was not because
- 8 | it had anything to do with apps but because it used the word
- 9 motivate for measuring consumer's purchase decisions,
- 10 correct?

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- 11 \parallel A. That's the questions you asked me.
- 12 \parallel Q. Right. And that was what you were critical of Dr.
- 13 Wecker about doing was using the word motivate in his
- 14 ∥ surveys, right?
- 15 A. Correct.
- 16 \parallel Q. And you understand I was showing you that document to
- 17 \parallel show that Apple uses that same terminology?
- 18 | A. Correct.
- 19 | Q. Despite the fact that you say no one should ever use it
- 20 | and you haven't seen it in thousands of surveys, right?
- 21 | A. I have not used it, and I have not seen it, correct.
- $22 \parallel 0$. Now, the question here is in this case -- that Dr.
- 23 Wecker addressed is, is the only reason you're purchasing
- 24 | this phone is because of its ability to download and purchase
- 25 \parallel the app from the App Store. That's what he was getting at,

right?

- A. In that question, generally speaking, yes, sir.
- 3 | Q. You understand that's the issue that Mr. Mills was
- 4 | looking at for -- for performing his damages calculation,
- 5 ∥ right?

- $6 \parallel A$. Correct. The -- the answer to that question, yes.
- 7 | Q. Right. And you agree that you could have gone about
- 8 getting an answer to that question if you'd been given the
- 9 opportunity to conduct your own surveys, right?
- 10 A. Yes.
- 11 | Q. If Apple had asked you to do that, right?
- 12 A. Correct.
- 13 Q. Instead, they asked you to spend \$300,000 on surveys
- 14 saying why Dr. Wecker's surveys weren't right, right?
- 15 A. And I believe, as you'll hear from Dr. Becker, he's
- 16 \parallel going to testify on the value, but my focus was on
- 17 | reliability of Dr. Wecker's surveys, correct.
- 18 \parallel Q. Wouldn't you agree with me that if you really wanted to
- 19 show why these surveys were no good, you could conduct your
- 20 | own survey to show exactly what Apple says the value
- 21 attributable to these patented features are?
- 22 | A. No. You would have to do a different survey for that.
- 23 Q. But you could do a different survey and do that, right?
- 24 | A. I said I wasn't asked to do that.
- 25 | Q. I understand. But you're saying you could do that with

- a different type survey formulated by you with your

 expertise, you could get at the heart of this question,

 couldn't you?
- A. I said earlier generally speaking, because you have to keep in mind it's 2009. We're in 2014.
 - Q. I understand. So you're saying it's impossible?
- 7 A. I would have to think about it, to what the value was 8 in -- five years ago.
- 9 Q. Does it make you think that maybe Apple doesn't want to 10 know what the answer is to that question?
- 11 A. I don't know what Apple wants to know.
- Q. We've only got one survey to rely upon that goes to that question, and it's Dr. Wecker, right?
 - A. Only one survey that has a value; but as I said, there are other ways to value a feature, and the jury will soon hear from that person.
- 17 MR. WARD: Pass the witness.
- 18 THE COURT: Redirect?

REDIRECT EXAMINATION

20 BY MR. ALBRITTON:

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- Q. Dr. Dhar, do you believe, in your expert opinion, that the data obtained from the surveys conducted by Dr. Wecker suggest that the sole reason for buying the iPhone is the capability of purchasing and downloading apps?
- 25 | A. I do not.

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And do you have data that supports your opinion?
Α.
    That's correct.
         MR. ALBRITTON: Pass the witness.
         MR. WARD: Nothing further.
         THE COURT: Nothing further.
         You may step down, Dr. Dhar.
         THE WITNESS: Thank you, sir.
         MR. ALBRITTON: Your Honor, may Dr. Dhar be
finally excused?
         THE COURT: Is there objection?
         MR. WARD: No objection.
         THE COURT: Dr. Dhar, you are excused from your
attendance at Court. You're free to stay. You're also free
to leave.
         THE WITNESS: Thank you, Your Honor.
         THE COURT: It's your decision. Thank you.
         All right. Defendants, call your next witness.
         MR. ALBRITTON: Thank you, Your Honor. We call Dr.
Becker.
         THE COURT: All right. Dr. Becker, if you'll come
forward and be sworn.
          (Witness sworn.)
         THE COURT: Please have a seat on the witness
stand.
         MR. ALBRITTON: May it please the Court.
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1 THE COURT: You may proceed, Counsel. 2 MR. ALBRITTON: Thank you very much, Your Honor. 3 STEPHEN BECKER, DEFENDANT'S WITNESS, SWORN DIRECT EXAMINATION 4 5 BY MR. ALBRITTON: 6 Q. Good morning. 7 Good morning. Α. Please introduce yourself to the jury, please sir? 8 9 My name is Stephen Becker. 10 Dr. Becker, have you created some demonstratives to use 11 with your testimony today? 12 I have. Α. 13 All right. Let's -- we'll bring those up. Do you have the clicker so you can click, yourself? 14 15 Α. I do. Great. Thank you, Dr. Becker. 16 17 If you would, introduce yourself to the members of the 18 jury, please, sir. 19 Yes. As I said, my name is Stephen Becker. I live in Α. 20 Austin, and I'm the founder and director of a firm called 21 Applied Economics Consulting Group. We're a firm that does 22 economic analysis in a variety of industries, including 23 valuing intellectual property like I'm doing here today. 24 Dr. Becker, tell us about your family situation.

Well, I'm married, been married 21 -- almost 22 years.

- 1 | I've got a 19-year-old son who's a sophomore in college, and
- 2 | proud to say he's just recently been admitted into the Marine
- 3 Corps Officer Candidate School, so he'll be going off to the
- 4 | Marines as soon as he graduates from college. And then my
- 5 daughter is 18 -- just turned 18 a couple of weeks ago, and
- 6 she's a senior in high school.
- $7 \parallel Q$. All right. Has she been recently admitted to college?
- 8 A. She has. She luckily got into her first choice, so it
- 9 took a big pressure off of us.
- 10 | Q. And you're married?
- 11 | A. I am.
- 12 \ Q. And what does your wife do for a living?
- 13 A. My wife is the mental health medical director for
- 14 | Medicaid in Texas, so she's responsible for the medical
- 15 | aspects of all the Medicaid services that are offered in
- 16 Texas.
- 17 | 0. Is she a doctor?
- 18 \parallel A. She is.
- 19 Q. Dr. Becker, if you would, tell us a little bit about
- 20 your educational background, please, sir?
- 21 | A. All right. I've got a slide on that. I started out
- 22 | first as getting an engineering degree. I went to the
- 23 University of Pennsylvania and received a Bachelor's of
- 24 | Science in computer science and electrical engineering from
- 25

Penn.

Then after working for a number of years, I had gotten myself back to my hometown, Austin, and went and got an MBA in finance from UT Austin.

Then went off and worked for a while again, and the pull of getting back to my hometown was pretty strong, so I ended up back in Austin yet again to get a Ph.D. from the LBJ School in Public Policy.

- Q. Dr. Becker, what was the focus of your public policy degree?
- A. I was -- my research was in a field called econometrics and was looking at the ways that the tools that economists were using to study questions of basically funding public education, whether those tools were actually telling them how to better improve public education.
- Q. Dr. Becker, as part of your higher education, did you receive any awards or honors?
- A. I did. In my engineering curriculum in both my junior and senior years, I was given an award by the faculty of the engineering school that they give to the student that they vote as the sort of top engineering student in the department each year.

I received that award in my junior year and, again, in my senior year of the program at Penn. And then at the University of Texas in my Master's program, I graduated with what's called the Dean's Award for academic excellence and

- something called a Sword Scholar which is given to the top
 few people in the class.
 - Q. Tell us a bit about your work history, if you would, Dr. Becker.
 - A. Well, after getting my engineering degree, I went to work for an oilfield services company called Schlumberger. I was in their research labs in Houston, doing computer systems research. I then left that job to form my own computer systems company called The Solutions Group.
 - We -- I primarily did systems design for this sort of newfangled thing that was out at the time. I'm dating myself. But it was this thing called the personal computer. Nobody had ever seen one, and we were all trying to figure out how to use it.

And then I went to work for -- after my Master's degree, for a firm called Booz Allen & Hamilton as a management consultant.

- Q. Now, tell us, what does a management consultant do?
- A. It encompasses a pretty broad array of things that management consulting firms do. I primarily was focused on questions that pretty large companies, mostly Fortune 500 companies in the U.S., Canada, and Mexico had as to -- sort of how they either get into a business, how to make the business they had more profitable, and in some ways how to get -- how to get out of businesses. We did some projects

business, so we helped them do that.

- like for a big steel company that was realizing that being
 in -- milling steel was not going to be a good thing to be in
 and they needed to figure out how to get out of that
 - Q. Okay. After you left Booz Allen where you were working as a management consultant, what did you do?
 - A. That's when I decided to move back to Austin and get a

 Ph.D. at the University of Texas and essentially settle down

 and do what I'm doing now.
 - Q. Okay. And you've described a bit, but tell us a little bit more about your current employment.
 - A. Well, Applied Economics is a firm that I started really when I moved back to Austin and started the Ph.D. program at the University of Texas. I -- just through working, I ended up meeting the person that is my current business partner.

We liked working together, so we decided to hang out a shingle and see if we could make a go of it. That was almost 20 years ago that we first started working together. And just bit by bit over the years, we've built the firm into -- I think there are 25 people now, and we have people in Austin, Houston, Washington, D.C., and Boulder, Colorado.

- Q. Dr. Becker, are you a member of any professional organizations?
- A. Yes. I'm a member of the American Economic Association, the American Finance Association, and something called the

- Licensing Executive Society. 1
- 2 What does that Licensing Executive Society have to do 3 with?
- 4 It's -- it's a professional organization focused on licensing of intellectual property, and so the members of 5 that come from academic fields and professional fields that 6 7 all deal with questions of valuing and licensing of patents and other forms of intellectual property.
- 9 Dr. Becker, have you ever served as an expert witness concerning the issue of patent infringement damages benefit? 10
- 11 Α. I have.

- About how many times? 12
- 13 I think at last count, I've been a testifying expert in 14 over 50 patent cases.
- 15 Okay. Now, if you would, describe the types of Ο. companies that you work for. Do you work for both accused --16 17 Plaintiffs, like Smartflash, and also accused infringers like 18 Apple?
- 19 Yes, over the years, probably half and half have worked 20 for patentholders who are claiming infringement and for 21 Defendants who are responding to those claims.
- 22 Dr. Becker, you told us about your -- your background in engineering and computer science. Are you here to offer 23 technical opinions in this case? 24
- 25 Α. I'm not.

- Q. Are you here to test about -- testify about infringement or validity?
 - A. No, I'm not.

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analyze.

- 4 | Q. Do you think that background is relevant, though?
 - A. I do find over the years I do a lot of work in the telecommunications and networking and computer industries, the types of patent cases that I've done; and more often than not, having that engineering degree, at least it helps me understand some of the documents I'm reading and some of the issues in sort of where does the technology fall within the overall scope of some of these products that I've had to
 - Q. So how does this help with your economic analysis?
- Well, we'll see a little bit later that the -- one of 14 15 the fundamental questions in any patent case is separating what value should be ascribed to the invention itself as 16 17 apart from things that are not part of the invention and that 18 were brought to the table by, for example, the company that 19 made the product and was selling it. And having some 20 engineering understanding of how those products are made, helps with that economic analysis. 21
 - Q. Dr. Becker, what do you understand that the patents in this case relate to?
- A. It's my understanding that the claims here relate to a particular way to pay for protected content that includes

- 1 | things like movies, apps, TV shows.
- 2 | Q. Is it your understanding that they describe or these --
- 3 these patents relate to the mere capability to download apps?
- 4 A. No. It's my understanding they don't, and I've heard,
- 5 you know, this week or last week testimony to that effect.
- 6 | Q. Is Applied Economics being compensated for your time and
- 7 your work in this case?
- $8 \parallel A$. They are.
- 9 Q. And what is your current hourly rate?
- 10 \parallel A. My firm's billing rate for my time is \$595 per hour.
- 11 \parallel Q. Now, is that the standard rate you charge in your cases,
- 12 Dr. Becker?
- 13 | A. Yes.
- 14 | Q. And does your compensation depend on your opinions or
- 15 | the outcome of this case in any way?
- 16 \parallel A. No, not in any way.
- 17 MR. ALBRITTON: Your Honor, I would tender Dr.
- 18 | Becker as an expert on patent valuation and patent
- 19 | infringement damages.
- 20 THE COURT: Is there objection?
- 21 MR. CASSADY: No objection, Your Honor.
- 22 THE COURT: The Court will recognize the witness as
- 23 an expert in those fields.
- 24 MR. ALBRITTON: Thank you. Thank you, Your Honor.
- 25 THE COURT: Proceed.

- Q. (By Mr. Albritton) Dr. Becker, can you tell the jury about your assignment in this case?
 - A. Yes. As indicated on the slide here, I had basically two assignments. The first was to review and comment on the opinions offered by Smartflash's damages expert, Mr. Mills.

And, second, to independently sort of set his opinion aside and come up with what I thought was a reasonable royalty for a license to the patents-in-suit.

- Q. Dr. Becker, what evidence did you consider in this case?
- A. Well, there's -- this case is no different than a lot of cases that I've worked on where we have literally mountains of -- of documents, some produced by Apple, some produced by Smartflash, financial documents.

We've seen some of those in the last week. There are a lot of Court documents, expert reports filed by both sides.

Those experts give depositions, so that testimony I consider.

I have had discussions with some Apple personnel to gain a better understanding of certain issues. And then I've looked at deposition testimony and exhibits from fact witnesses. And my team and I have also done research on publicly available information.

Q. Now, Dr. Becker, in addition to this information that the jury's looking at on the screen that you studied before trial, have you been here during trial and heard the

- testimony of Dr. Wecker, Mr. Mills, Mr. Racz, Dr. Jones, and Dr. Dhar?
 - A. Yes.

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- Q. Before we get into the specifics, the nitty-gritty, if you would, please provide the jury with a summary of your opinions.
 - A. I've reached three primary conclusions.

First, if the patents-in-suit are valid and infringed, it's my opinion that the appropriate measure of damages is a reasonable royalty. We'll get to the specifics of that in a bit.

Second, Mr. Mills's opinions are unreliable, and I think vastly overstate the value of the patents and the damages.

Third, it's my opinion that that reasonable royalty that would come out of a negotiation between Smartflash and Apple is a fully-paid-up, lump-sum payment of 4-and-a-half-million dollars.

- Q. Dr. Becker, do you have any opinion as to how Mr. Mills could get to a royalty in this case that's almost 200 times greater than the royalty you reached?
- A. I do. I've studied his work, and I think I have an understanding of where it got off the rails.
- Q. Dr. Becker, you've studied Mr. Mills's opinion in this case?
- 25 | A. I have.

- Q. And after doing so, what did you conclude?
- 2 A. Well, if -- if you look at all the -- the sort of
- 3 schedules that he uses to come up with his opinion and the --
- 4 the formula that comes up with -- his primary number, I
- 5 | think, is 852 million, that formula reduces down to -- it's
- 6 | really actually pretty simple. There's only like four or
- 7 | five components to the whole thing.
- 8 | Q. Well, did you create a graphic that shows that?
- 9 | A. I did.
- 10 Q. If you would, put that up, Dr. Becker.
- 11 If you would, explain to the jury what we're looking at
- 12 here.
- 13 A. Well, I was here when Mr. Mills testified, and I think
- 14 | he -- he explained that he has something called a royalty
- 15 \parallel base and a royalty rate. And in a lot of patent cases,
- 16 \parallel the -- the royalties -- the damages are simply multiplying
- 17 | the royalty base times the royalty rate. And Mr. Mills has a
- 18 \parallel model that follows that -- that -- that approach.
- 19 When I look at what drives his royalty base, it really
- 20 | reduces down to just three things. He's got the -- and I'll
- 21 | use the iPhone as an example here, but this is -- the same
- 22 | formula applies to iPads and to iPod Touches.
- 23 | Q. Okay.
- 24 A. And I'm only talking about the time period that's at
- 25 | issue in this case. But setting that aside, the equation is

- really the number of units of iPhones, so all the units of iPhones that are sold in that time period.
 - Q. Sold in the United States?
 - A. Sold in the United States times Dr. Wecker's alone motivated percentage times the average selling price of each iPhone, so the average revenue per unit. So that's the base.

It's just iPhones, the price that they sold for, and the Wecker alone motivated percent. That's the base.

Then over on the rate side, there's only two components, the iPhone U.S. profit margin, so that's a percentage, what percent profit do they earn on iPhones in the U.S., times the -- what I call the Wecker scenario percentage. That's the percentage of people responding to that scenario that Dr. Jones provided to Dr. Wecker.

- Q. That was a scenario that Dr. Jones said would be non-infringing?
- 17 | A. It is.

- 18 Q. Okay. Do you have an additional slide that explains
 19 anything further about this?
 - A. Well, if I sort of say those are the -- I guess five components, if you look and see, three of those five are just -- that's just data that comes from Apple. This is just financial data from Apple on the number of units, the average revenue per unit, and the profit margin on those units. So that's just coming right off the financial schedules.

So you set that aside, really the only thing that's driving this that's not coming from these just direct financial records of -- of the hundred percent of the iPhones that were sold are the Wecker alone motivated percent question and the Wecker scenario percent question.

- Q. Does Mr. Mills present an alternative model, Dr. Becker?
- A. He did. I -- he has the other model that I think generates 800 million, give or take.

And as I indicated, if you -- see, the only thing that changes is that alone motivate question, he substitutes the answer, sort of the percentage responses to the Wecker percent value question.

- Q. But all other elements stay the same?
 - A. Yes. So you can see that even in this alternate model, the -- you've got the three inputs that relate to the -- just the -- what are the units that were accused of the devices, the price of those units, and the profit margin on them, and the rest is just -- in the alternate, it's the Wecker percent value and the Wecker scenario percent.
 - Q. Dr. Becker, do you have an opinion about whether either of these models is reasonable for Mr. Mills to use to compute damages in this case?
- 23 A. I do have an opinion on that.
- \parallel Q. Can you explain the reason to us, please, sir?
- 25 ∥ A. Well, I -- I think the -- using this model is not

- appropriate in this case and leads to a dramatic overstatement of the damages and a dramatic overstatement of the value of this claimed invention.
- Q. Do you have a summary slide that lets -- sets out those reasons?
 - A. Yes. There are really three basic reasons that -- you know, if you -- once you realize that what's driving all the damages is just that simple equation. First, basing a royalty on the sales of the iPhones, the devices themselves, I think, is unreasonable. Given what's claimed to be the inventive thing here.

Second, Mr. Mills consistently assumes -- by what he sticks into his model, he's consistently assuming an overly broad scope of the invention.

And, third, the survey questions that he relies on for his two key inputs, they themselves are overly broad. And we heard from Dr. Dhar that there's some technical issues with those that render them unreliable.

- Q. Can you explain your first point?
- A. Well, on this first point, the iPhone itself is a device that does many, many things. Imagine, it's like a car. You can drive it around. You can go to the store, you can go to the movies, you can go to the lake, you can go pick up the kids, you can do a lot of things with it.

And the claimed invention here is one part of one thing

that can be done with that device, and so I think as just a threshold matter, when you come up to it, it seems you're going to have a real task to get down to just the invention and the value of the invention in that device. But also the -- the -- the sort of types of transactions that are at issue in this case.

Renting a movie, that's happening in the -- in the store. I mean, I think we heard the iPhone was a big success before Apple is even accused of infringing. And then something changed at the iTunes Store when they offered -- started renting movies. And that is the thing that triggers Smartflash saying now you infringe.

So those things are happening at a store. They're not sort of in the -- in the device that's getting you to the store.

- Q. Dr. Becker, you were here when Mr. Mills was asked some questions by Mr. Batchelder?
- A. Yes.

- MR. ALBRITTON: Mr. Lee, if you would put up Page 20 12, Line 16 through Page 13, Line 16?
- Q. (By Mr. Albritton) If you would, read that to the members of the jury.
- A. Yes. So it -- it says: You talked yesterday about a hypothetical negotiation, right?
- 25 And the answer was: I did, yes.

And you said: The date of it would be June 2009, right? 1 2 Answer: Yes. 3 Let me ask you to consider the time period just before 4 that, say, May 2009, all right, sir? 5 Answer: Yes, sir. 6 The iPhone had been on the market for two years, 7 correct? 8 Answer: Yes. 9 A fabulously successful product, correct? Answer: Yes, sir. 10 11 Arguably, the most successful product in the history of consumer electronics? 12 13 Answer: I'm not certain that I can attest to that, but 14 it certainly is a successful product, yes. 15 And even under the assumption that Smartflash's lawyers asked you to make, nothing about the iPhone was infringing 16 17 any of the patent claims asserted in this case in May of 2009, correct? 18 19 As far as I know, that's correct, yes. 20 What changed in 2009, according to the assumption that 21 Smartflash's lawyers have asked you to make was that the 22 iTunes Store offered movie rentals, correct? 23 Answer: Yes, sir. 24 Now, Dr. Becker, why is this testimony important to you? 25 Well, this is precisely the point I was just making

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which is that the device itself is -- shouldn't be the focus of the -- the sort of royalty equation here. If you were going to have a -- something focused on what is generating the value, these devices, before they're even accused of infringing, were fabulously successful. And what changed was something at the store, not in the car that's driving you to the store. THE COURT: Let me interrupt just a minute. Ladies and Gentlemen, we're going to take a short I'm going to allow you to leave your notebooks in your chairs. Don't discuss the case among yourselves. We're going to try to make this about 10 minutes, so please take this opportunity to stretch your legs and get a drink water, and we'll be back in here shortly to continue with the direct examination of Dr. Becker. But you're excused for recess at this time. COURT SECURITY OFFICER: All rise for the jury. (Jury out.) THE COURT: All right. We stand in recess. Let me see one lead and one local counsel from each side in chambers, please. (Recess.) (Jury out.) COURT SECURITY OFFICER: All rise. THE COURT: Be seated, please.

Ms. Mayes, please bring in the jury.

(Jury in.)

THE COURT: Please be seated.

Before we continue with the direct examination of the witness, I want the Ladies and Gentlemen of the Jury to know a couple of things. I know you're concerned about the weather outside. The Court's concerned about the weather, too.

Part of the reason why we just took a recess was so I could consult with counsel for both sides. I don't see any realistic possibility that we will go later than midafternoon at the latest.

It will -- it will be extremely helpful to the Court and to the staff if we could get the evidence finished today. And I think we can do that by early to midafternoon.

I've made arrangements with the Clerk of the Court that at whatever time I release you for the day, they're going to take you downstairs and load you in a van in a covered area and drive you to where you are parked around the Square, so you won't have to walk across the Square or whatever to get to your vehicles, and you can drive out from there.

I don't think that any of this will create a serious threat or chance of harm, but we're trying to take every reasonable precaution that we can and still get the

evidence finished, if at all possible, today. You're not going to be here at 5:30 tonight. I'll be surprised if you're here at 3:30.

I'm going to shorten the lunch hour. We'll have lunch brought in. We'll only take 30 minutes for our lunch to try to keep things moving. We'll keep our recesses as short as we can, all with an eye toward getting you out of here as soon as possible today.

So we're all aware of the situation. I just wanted you to know that the Court's aware of it, and within the restrictions of trying to give these parties their full time to present their evidence, we're trying to work with that, as well as with the weather.

So I'll keep you posted. I just want you to be aware that the Court has those thoughts and will keep those things in mind as well.

All right. You may continue, Mr. Albritton.

MR. ALBRITTON: Thank you, Your Honor.

Q. (By Mr. Albritton) Dr. Becker, let's go back to Slide No. 13, please, sir.

So tell us, again, if you would, what are the two -what are the things being used by Dr. Becker -- I'm sorry -by Mr. Mills to arrive at this 800-plus million dollars he
says Apple should pay Smartflash?

A. He's using, as we talked about, the devices themselves

- and the sales and profit margins of those devices, and then
 the only sort of non-Apple information that's coming in is
 the Wecker alone motivated percent question and the Wecker
 - Q. Were you here when Mr. Mills said that he had performed a Georgia-Pacific analysis?
 - A. I was.

scenario question.

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- Q. And is Factor 13 one of the factors he said that he considered?
- 10 A. Yes.
- 11 Q. If you would, Dr. Becker, tell us about Georgia-Pacific 12 Factor 13.
- 13 A. I think I've got a slide on it.
 - Okay. So Factor 13, Mr. Mills described that there are these list of factors that are sort of a checklist that his damages experts were supposed to consider. And Factor 13 is an important one, particularly in a case like this, and I'll just read it.
 - It says: The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
 - So we've got sort of two elements. The one on the left-hand side is the portion of the realizable profit that

should be credited to the invention, and the other side is anything that is distinguished from the invention.

So it's the non-patented elements, the manufacturing process, the business risks, anything that the accused infringer, in this case Apple, brings to the table.

- Q. So if the invention is one way to pay for things, like movies or apps, where are all the other things related to the iPhone and the iPad and the iPod Touch and even the iTunes Store, where are they supposed to go?
- A. Well, they're supposed to be on Apple's side of the table, this stuff that's distinguished from the invention that are credited to the Apple side of the equation. And those are the non-patented elements.

So, certainly, the parts of the iPhone, the screen, the -- the -- the user interface, those things, I think, are obvious; but even within the App Store or in the iTunes Store, there's lots of things that are not the invention, which is the way to pay. There are the other things that Apple brings to the table in the App Store.

- Q. So do you have an issue -- do you have other issues, in addition to using the sales of those devices as the royalty base?
- 23 A. I do. I do.

- 24 | Q. Okay. Tell us about that.
- 25 A. So that's -- set that aside.

The -- even if you set aside the fact that, I think, using the iPhones and the devices themselves is necessarily sort of -- no matter how good you get on the question, you're going to be in the wrong place with respect to what you're building your royalty base out of. It's just the wrong set of bricks.

The question -- this alone motivate question is overly broad. It's just -- broadens the scope of the patent in ways that pushes things on to the Smartflash side of the negotiating table that shouldn't be there, according to what the -- this sort of Georgia-Pacific factor analysis, and in particular, Factor 13 tells us we have to do.

- Q. So if you would remind the members of the jury the questions that he uses.
- A. I'm not sure I'll get the exact wording, but it was --
- 16 Q. I think you have a slide, Dr. Becker.
- 17 MR. ALBRITTON: If you would go to Slide 15.
- 18 | Maybe not. I apologize.

- 19 A. No, we don't have one.
- 20 Q. (By Mr. Albritton) Okay.
 - A. It's -- the question was something to the effect of were you alone motivated by the capability to purchase apps?

And that is certainly more than -- there's a lot that goes into the apps and the App Store, and just the capability of purchasing them strikes me as, on its face, more than the

- particular way to pay for when you check out of the App Store.
- Q. Okay. And what's the alternative question that

 Dr. Becker uses -- I'm sorry -- Mr. Mills uses for his

 alternative royalty base calculation?
 - A. It's the -- what percent value did you ascribe. But, again, it's to the exact, same sort of formulation of the question, which is what percent of value do you attribute to the capability of purchasing apps?

So, again, it's just this sort of broad -- everything to do with apps, not the invention -- or the claimed invention, which is the way to check out of the store.

- Q. And do you have the same opinion regarding the capability to purchase and rent movies and TV shows?
- 15 A. Yes.

- Q. Dr. Becker, what about the third question, just on a high level, that Dr. -- Mr. Mills uses for this royalty rate?
 - A. Well, the -- the scenario -- the Jones scenario -- I think if we go here, you can see on -- over on the right, on the royalty rate, the Wecker scenario percent question.

I understand that that is also flawed in the sense that Dr. Dhar's opinion is that the way that was presented with the sort of very negative connotation that we're going to disable everything, we're going to disable the capability to purchase apps, and then we're going to put something else in

place.

Well, when you're disabling the capability, you're turning everything in the App Store off, everything that -- you know, and the same with the movies rental.

Q. Absolutely.

So let's talk about his first damage model that yields this \$252 million. Do you have an opinion as to whether it's reasonable to base his damages on these survey results?

- A. I do. It's not reasonable to use these two isolated questions given how broad they are and also the -- from Dr. Dhar's analysis, we know that they're -- they're not
- Dhar's analysis, we know that they're -- they're not producing the results that Mr. Mills assumed they were.
- Q. Yeah. What do you understand about and how did you utilize in your opinions Dr. Dhar's testimony and his survey results?
 - A. Well, we heard him explain the results; but on that alone motivated percent, as you'd expect, if a particular feature was the sole and exclusive reason that they bought it, they would answer no if you asked them about something else.

And Dr. Dhar asked the people who took this same survey about 10, 12 -- I think it was 12 other features, and a hundred percent of them said: Oh, yeah, that other feature motivated -- was a motivator as well.

And a very large percentage of them answered that most

of those 12 features were motivating their purchase.

So it can't be the case that people understood and were responding in the way that Mr. Mills necessarily assumes they were for this model to -- to be a sound basis for a damage claim.

- Q. Now, you were here when Mr. Mills was asked questions about this topic?
- A. Yes.

9 MR. ALBRITTON: If you would, let's bring up Page 10 24, Line 7 through 10.

- Q. (By Mr. Albritton) What is that testimony there, and why
 does it matter to you, Dr. Becker?
 - A. Well, he was asked: So it's your position that a given product can have features that are necessary for the purchase decision but not motivate the purchase decision?

Yes. Certainly, yes.

So -- and he answered this in a couple of ways as well, that I understand his position to be that notwithstanding that he asked the question and assumed that when people said this was the sole motivator, his -- the math of his equation depends on that being the only reason.

He is acknowledging that there's a lot of other features in the phone that they wouldn't buy it if it wasn't there.

And so back to that Factor 13. We've got to keep those things on Apple's side of the table. And if you treat the

- question the way Mr. Mills does, you scrape all that value over to Smartflash's side of the table.
- Q. In the course of your work in this case, did you review some internal surveys performed by Apple?
- 5 | A. I did.
- 6 Q. Are they consistent with your conclusion that many
- 7 different features drive demand for the accused Apple
- 8 devices?
- 9 \parallel A. They are.
- MR. ALBRITTON: If you would, Mr. Lee, let's bring up Plaintiffs' Exhibit 103.028 at 10.
- 12 Q. (By Mr. Albritton) Can you see that good, Dr. Becker?
- 13 A. I do see that. That's -- that's great.
- 14 Q. Okay. And have you seen that before?
- 15 A. I have.
- 16 Q. Does this document, this Apple survey, support the
- 17 assumption by Mr. Mills that 28 percent of Apple's company --
- 18 I mean, Apple's customers solely bought the iPhone because of
- 19 the capability to download and purchase apps?
- 20 A. No, not at all. In fact, it demonstrates quite the
- 21 opposite.
- 22 \| \(\text{O.} \) Now, why is that?
- 23 A. Well, I think this slide maybe was used with Dr. Wecker
- 24 | as well, and one of the questions that's asked here is --
- 25 THE WITNESS: Over there on the purple bar, if you

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can blow up the whole U.S. bar. On the left. MR. ALBRITTON: Yes, sir. THE WITNESS: There you go. Okay. That 24 percent purple slice, about five down Α. from the top, corresponds to wanted to use apps. And this sort of makes two points. One is, if it's the sole and exclusive motivator, you wouldn't have this stack of reasons adding up to more than a hundred percent. And it adds up to quite a bit more than a hundred percent. And this -- these people were only asked to provide up to three reasons. So there may have been others. They were limited to three reasons, and we see that they're crediting or checking more than one box as the -- as the -- the main reason. The second point is that "wanted to use apps," I mean, I -- I think the testimony has been pretty clear that Mr. Racz and these patents are not claiming that they invented apps. So wanting to use apps is far too broad a characterization.

And that 24 percent, I think Dr. Wecker said: Yeah, that's about what I found in my survey. But this is the broad just wanted to use apps, and it's one of a number of reasons that this survey is showing.

- Q. (By Mr. Albritton) Were you here when Mr. Racz said that he didn't invent apps?
- 3 | A. Yes.
- 4 Q. Were you here when he testified that he didn't invent
- 5 | the ability to purchase content --
- 6 A. Yes.
- $7 \parallel Q$. -- on the Internet?
- 8 A. Yes.
- 9 MR. ALBRITTON: If you would, Mr. Lee, let's bring
 10 up Plaintiffs' Exhibit 103.028 at 230.
- Q. (By Mr. Albritton) Dr. Becker, have you seen this
- 12 document before?
- 13 A. Yes.

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- 14 \parallel Q. And what is it?
- A. This is a summary of the results from another form of survey that Apple ran very similar to the one we were looking at, although this question --
- 18 THE WITNESS: If you can highlight the question
 19 down at the bottom --
- A. Here people were given the opportunity -- not limited to three reasons. They were given the opportunity to rate -- I think there's 12 things on this slide.
 - And what we find is that a very high percentage of people rate a lot of these features, in fact, most of these features, as very important in their purchase decision.

- Q. (By Mr. Albritton) So let's just look at the first one.
 What's the highest percentage?
 - A. Well, 94 percent of these respondents said that easy to use was very important -- or important in their purchase decision for the iPhone.
- Q. Does that suggest to you that 23 percent of the people that bought iPhones bought them solely and exclusively for the ability or the capability to purchase apps?
- 9 A. No. In fact, it demonstrates that that can't possibly 10 be the case.
- 11 \parallel Q. Let's look at the second one and the third one.
- A. So battery life, trust the Apple brand, value, these are all things that are back to that Factor 13, should be credited to things that Apple brings to the table.
 - Making it a trusted brand, providing good value for the price, these are all important motivating factors or important factors -- attributes in the decision to purchase the iPhone for a very high percent of the people.
 - Q. Now, under Smartflash's theory, do they say these patents have anything to do with battery life or the Apple brand or the value of the price paid?
- 22 A. No.

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- Q. Now I'd like to draw your attention down to the questions about apps right there under services and support.
- 25 MR. ALBRITTON: Right there.

- Q. (By Mr. Albritton) What is that question, or what does that indicate to you, Dr. Becker?
- A. This is the quality of the apps available. We could see that 83 percent of the people rated that as an important -very important or important feature in their decision to purchase the iPhone.
 - And a little ways down, we have a similar one, the quantity of the apps.
 - Q. Now, even under Smartflash's theory in this case, do they have anything to do with the quality of the apps that are available?
- 12 | A. No.

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- 13 Q. What about the quantity of the apps that are available?
- 14 A. No, nothing.
- Q. Does this survey support Smartflash's position in any way, Dr. Becker?
- A. No. In fact, it -- it offers some -- an interesting
 insight into that 24 percent we saw on the last slide, which
 were -- people were saying wanted to use apps.
 - Well, now that we're drilling down to a level below that, what is it about the apps that people find to be important to their purchase decision, and at least this survey says over -- you know, quality of the apps and the quantity of the apps.
 - Q. Now, on this list, does it say anything about the ease

- of purchase or the manner of purchase of apps in the App Store?
 - A. No, nothing at all.
- 4 Q. All right. Dr. Becker, if you would --
- 5 MR. ALBRITTON: You can take that down, Mr. Lee.
- Q. (By Mr. Albritton) Dr. Becker, I think you have an iPad there at the podium with you.
- 8 A. I do.

- 9 MR. ALBRITTON: Mr. Lee, would you make sure that 10 that gets on the screen?
- 11 Thank you very much, sir.
- Q. (By Mr. Albritton) Now, were you here when Dr. Jones did
 a live demonstration? I think he was actually using an iPod
 Touch.
- 15 A. He was. And my eyes aren't that good, so I'm going to use an iPad, if I could.
- Q. Okay. So was his demonstration relevant in any way to the opinions you have in this case?
- 19 | A. It was.
- 20 \parallel Q. Tell us how so.
- A. Well, as he was going through that, I found it
 interesting that he was sort of navigating through the
 process of clicking on the App Store and getting in and
 getting to the point where he could, I think, demonstrate to
 the jury sort of where the claimed invention resided in

- 1 | these -- in the system.
- 2 Q. Now, let me ask you, was that when he went to push the
- 3 | button to purchase, push the button that had the price, push
- 4 | the button again, and then it downloads? That's what he said
- 5 was the invention?
- 6 A. Yes.
- 7 Q. Okay. Well, if you would, run us through what you think
- 8 are other important factors to consider under Georgia-Pacific
- 9 No. 13 as it relates to the App Store.
- 10 A. Okay. So the point I want to make here is that, you
- 11 know, there's been, I think, a lot of testimony about what
- 12 was the capability? Were the apps motivating? Big debate.
- 13 Were the apps the only motivator, or do people like to
- 14 \parallel send email? Do people like to do other things here?
- 15 Q. Let me just ask you this: You own an iPad yourself?
- 16 | A. I do.
- 17 | Q. What do you primarily use your iPad for, Dr. Becker?
- 18 | A. I'd say 90 percent of it is checking email and going on
- 19 the Internet and then using the mapping function to keep from
- 20 | getting lost in all the different cities I go through.
- 21 | Q. All right. So if you would walk us through the App
- 22 | Store that are there, Dr. Becker.
- 23 A. Okay. So the App Store here, we go to the App Store,
- 24 | one of the things that we see is that Apple has provided a
- 25 | best new apps, best new games. It animates.

It's pretty interesting here that this is -- you can kind of go around and see things they have -- top charts, so kind of like the old Casey Kasem Top 40, you can see the top charts to apps.

And that's an interesting functionality. That's part of the process of browsing for and purchasing an app. They -- you can see they provide -- they provide a wish list. You can create a wish list of apps, if you don't find what you want.

And they provide categories, so if you're looking in particular for something for -- let's say for your kids, you can click on kids and go see something for kids.

All of this is functionality that is part of down -- you know, purchasing the capability to go on to the App Store and purchase apps.

And I'll keep going. I'll search here. I'll say weather clocks. So they provided -- somebody had to build this functionality to be able to search through the millions of apps that are out here.

- Q. You were here when you heard Payam Mirrashidi and Mr. Muller sit here -- Muller -- excuse me -- sitting here to testify?
- A. I wasn't in the courtroom then, but I have -- I've read that transcript, and I understand they're engineers that helped build this functionality.

- Q. So Apple is responsible for this functionality, not Smartflash.
 - A. Absolutely.

- 4 Q. Okay. If you would, continue.
 - A. So if we keep anything here, you can see now just -I've searched, so that search functionality is -- is part of
 the process. I can click on -- I thought weather would be
 appropriate today, given what's going on outside.

So there's an app called clock and weather that -- and even here, you can see that they've provided the ability to get some information about the app. You can see screenshots of what's -- what the app is going to look like before you buy it.

You can click and see reviews. You know, people can write a glowing description of the app, but maybe people who bought it before you said: Ah, it's not so good. So you can read the reviews before you spend any money.

And then when you're ready to buy, you can -- you can click on that button.

- Q. So you click that button once?
- A. You click that button once, and then you say buy, and then it asks you for your -- for your password.

And, hopefully, if I did this right, it will start downloading. But the -- the point that I had is that -- I mean, everything up to this point, the graphics, the ability

- to search -- well, it's going to make --
- Q. You don't have to put in your personal credit card information in front of everybody.
- 4 A. I'm not going to do that. I think we've seen somebody
 5 buy the app, so...
- Q. So of everything that you've shown, up until the very end, is that stuff that even Smartflash admits has nothing do with their patent?
 - A. Yes.

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- 10 | Q. And how does this affect your opinions in this case?
- 12 the -- the survey questions and the sole motivator, you still

Well, it -- even if the debate weren't about, you know,

- 13 have to recognize that within the fence, within the boundary
- 14 of what we would call apps and the ability to use apps and
- 15 purchase apps, there's -- I cannot imagine the amount of
- 16 functionality and capabilities that somebody had to build,
- 17 | Apple had to build, to bring to the table.
- And we saw that the quantity of the apps and the quality
 of the apps that are available in this store are, according
 to the surveys, significant reasons why people purchased
- 21 | their devices.
- 22 | O. Thank you, Dr. Becker.
- Now, if you would, let's go back and look at your formula again, the formula that Dr. -- or that Mr. Mills uses.

1 MR. ALBRITTON: Back to the slides, please, Mr. 2 Lee. 3 (By Mr. Albritton) All right. If you would, we've Ο. 4 talked about the left box, the royalty base; is that right? 5 Α. Yes. Now, let's talk to the jury, if you would, please, sir, 6 7 about the box on the right. Well, that royalty rate, again, consists of just two 8 9 components, Apple's iPhone U.S. profit margin, that's expressed as a percent margin. So what percent profit did 10 11 they earn on the device times Dr. Wecker's scenario percent. That's the Jones non-infringing alternatives scenario. 12 13 Dr. Becker, do you have any opinions about Mr. Mills's 14 basing his royalty calculation on this question? 15 Α. I think that generates a flawed and inflated rate as well. 16 17 Why is that? Ο. 18 Well, the scenario question as it was posed, I 19 understand from Dr. Dhar, was posed in a way that generates 20 scientifically unreliable results. It was -- there was a lot 21 of negative framing of the -- of the question.

And I think they used the description that said:

Imagine that all your capability to do this has been disabled. Well, everything we just went through in that demonstration, you're going to disable all that, take that

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away from me?

I think that's what Dr. Dhar was getting at, that the negative framing of that could cause people to go: Well, no, I don't want that. As opposed to saying, what if at the end of the purchase process, everything is going to be the same?

Q. Excuse me. Okay. Great. I'm sorry. I didn't mean to interrupt you. My -- my mind went on me there for a second. I apologize. Okay.

THE COURT: Let's just proceed.

MR. ALBRITTON: Thank you, Your Honor.

- Q. (By Mr. Albritton) So do you have an opinion on the overall effect of this question, the use of this question and its results on your opinions in this case, Dr. Becker?

 A. Yes. This -- this question and given the fact that it's -- you know, it and the alone motivated percent question drive the damages. I mean, they're the only thing that's in here. They do not produce a reliable measure of damages and are not valuing the claimed invention here. They're not valuing these asserted patents.
- Q. Now, we talked about there -- you put up two different formulas, because Dr. -- or Mr. Mills has two different theories; is that right?
- 23 A. He does.
- \parallel Q. Are your opinions the same with respect to each of them?
- 25 ∥ A. Yes. They're -- it's -- all the same issues apply to

both.

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- Q. What is wrong with using this percent of value question?
- 3 A. Well, it -- similar to the -- the alone motivate,

4 | there's two problems.

One are the technical issues that Dr. Dhar addressed that -- you know, asking somebody about a feature in isolation, what value do they place on it, without giving them the opportunity to have all the other features to sort of divvy the value up.

I understand that produces highly biased and unreliable results, but also -- set those issues aside, what was asked, what they were asked to value was sort of the totality of apps, the ability to use apps or download movies. It wasn't focused on the method of checking out of the store.

- Q. Okay. So in sum, can you tell us your opinion about Dr.
 Mills' two theories of damages in this case?
- A. They are not reliable, and they don't generate a -anything like a reasonable valuation of the damages or the
- 19 patented value in this case.
- 20 | Q. Dr. Becker, what was your other assignment in this case?
- A. Well, my second assignment was to set all that aside and independently determine a reasonable royalty for a license to
- 23 | this -- to these patents.
- 24 | Q. And have you done that?
- 25 | A. I have.

- Q. Now, if you would, please remind the members of the jury what your opinion is in this regard.
 - A. My opinion is that the royalty would be a
- 4 4.5-million-dollar lump-sum payment.
- Q. Now, are damages only appropriate if the patents are found -- or the patent claims are found valid and infringed?
- 7 | A. Yes.

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- Q. If they're found either invalid or not infringed, how much would the damages be?
- 10 A. There would be no damages.

where you pay as you go.

- 11 \parallel Q. Let's talk about lump-sum payment. What is that?
- 12 | A. Well --
- 13 Q. Lump-sum royalty.
- A. -- when you're licensing technology, people and

 companies tend to do it in one of two broad ways. There's a

 lot of sort of flavors, but, typically, things break down

 into either making a one-time payment, sort of buying the

 rights outright, or doing what's called a running royalty
- And they're used in different circumstances. Neither
 one is sort of the best in all circumstances. It depends on
 the particular situation.
- Q. Now, what -- what is Mr. Mills putting forth in this case?
- 25 \parallel A. He's putting forth a running royalty.

Q. And what is your opinion?

- A. I think, given the circumstances of this case, the

 evidence indicates a lump-sum royalty is the most appropriate

 structure.
 - Q. Now, tell us, Dr. Becker, how you went about making that determination.
 - A. Well, I considered the specific facts of this case, a couple of factors more on that.

One is the nature of this technology. You've got products that have hundreds, if not thousands, of pieces of technology that go into them that you have to take into account.

And in those circumstances, the way companies tend to pay for one little slice of technology that's out of the whole big package is to just make a lump-sum payment, because trying to keep straight how much of a running royalty is appropriate for just that one piece that may be used by different people different ways is not something that people tend to do as the way they would form the royalty in that —in that circumstance.

- Q. Okay. What other factors did you consider in reaching your opinion that a lump-sum royalty was appropriate?
- A. Well, I looked at the evidence of what Mr. Racz, who would be the person sort of negotiating this license for Smartflash in June of 2009 -- looked at whether there was

- evidence of whether he would have been willing to accept a lump-sum payment for an interest in these patents, and the evidence was that he had been expressing in various ways his willingness to take a lump sum for a -- an interest in the patents.
- 6 Q. Okay. What else did you look at and consider?
- A. Well, you look at -- the other side of the table is

 Apple. The evidence indicates that Apple's typical practice

 and certainly its preferred method of licensing technology

 for devices like this is in a lump-sum payment.
- 11 | Q. You -- you were here when Mr. Racz testified?
- 12 | A. Yes.

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- Q. Did you hear him describe how, in his early business plans back in 2001 or even earlier, he thought he might be able to get a running royalty as a license?
- 16 | A. Yes.

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- Q. Now, how does that affect your testimony and your opinions, Dr. Becker?
- A. Well, I -- I certainly was aware of that, and the -it's very early in the process for him. It's a business
 plan. I'd love to have had the things that I put in my
 business plan for my first computer company be something that
 I could say were absolutely doable.
 - They were an aspiration back in 2001, but the negotiation in this case is in 2009, and you have to take

- into account what the marketplace and what everybody sort of understood to be the circumstance at that time, not what somebody back at the beginning had maybe aspired to.
 - Q. And does Dr. Mills agree that the hypothetical negotiation in this case was June of 2009?
 - A. He does.

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- Q. How did you go about determining the amount of the reasonable royalty, Dr. Becker?
- 9 A. Well, I conducted what's called a hypothetical

 10 negotiation. Mr. Mills described this as well, so we're in

 11 agreement on the general sort of framework.
 - In June 2009, we imagine Smartflash and Apple coming together to negotiate, in a business setting, a license to this technology.
 - Q. And did you make some assumptions about that hypothetical negotiation?
- 17 A. Yes, the -- a couple of key assumptions that have to be made.
 - First, that the parties have to assume the patents are valid and infringed.
 - Second, the parties have the same information. We're sort of at the table with the cards face up instead of keeping things close to your vest.
 - And third, and importantly, the parties have to reach an agreement that's reasonable for both sides. So it's a --

- it's a reasonable business solution for both sides.
- 2 | Q. Now, why is this characterized as hypothetical?
- 3 A. Well, it never happened. So, obviously, we wouldn't be
- 4 here today if they'd had a negotiation in 2009. But to put
- 5 | ourselves at the point in time that Apple had a first -- is
- 6 | first accused of using this technology is when the courts
- 7 have said: You need to focus the analysis on that point in
- 8 | time.

- 9 So that's why we sort of have to imagine a negotiation
- 10 | happening in June.
- 11 | Q. Now, because it's hypothetical, should you ignore or
- 12 | discount the real-world facts?
- 13 A. No. It's one of the things you've got to be careful to
- 14 do is not -- in sort of picking yourself up and going back to
- 15 | June of 2009, we don't undo things that were really happening
- 16 \parallel at the time.
- 17 | 0. Are there -- let's talk about what factors you
- 18 considered in determining the outcome of the hypothetical
- 19 | negotiation in this case, Dr. Becker.
- 20 \parallel A. Okay. And I'll, in the interest of time, go through
- 21 | these pretty quickly.
- 22 Georgia-Pacific factors, Mr. Mills described these.
- 23 There was a case a long time ago that outlined 15 factors
- 24 | that as a damage expert, you sort of use this as a checklist
- 25 to go through.

You're not going to find them all relevant in every case. Some cases, different factors turn out to be the ones that are most important or most relevant. But you do go through and consider them all, and I have done that.

- Q. What factors did you determine were the most important in coming up with a reasonable royalty in this case, Dr.
- 7 | Becker?

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- 8 A. So here are the ones that I concluded were most
 9 relevant, are Factors 1, 8, 9, 10, 13, and 15. And we'll
 10 talk about each of those.
- 11 | Q. Which factor would you like to discuss first, sir?
- 12 A. Let's talk about 13. I think I can hit that pretty
 13 quickly.
- 14 | Q. Is it significant in this case?
- 15 A. It is. It's quite significant.
- 16 Q. Why is that?
- A. Well, we talked about this earlier. The -- Factor 13 is
 the one that says you've got to take the portion of the
 realizable profit that should be credited to the -- to the
 invention as distinguished from the things that Apple brings
 to the table.
 - And this is -- in a case like this where the technology is one of many things that go into making the product do what it does, Factor 13 is very important.
 - Q. Well, what evidence did you consider on the Apple side

- of the ledger?
- 2 A. Well, we -- so I indicated we've got to figure out
- 3 | things that Apple brought to the table because they don't owe
- 4 | royalties on that.
- 5 Q. Mr. -- I apologize.
- 6 A. So I looked at -- this is where my staff did some
- 7 research, and we looked at a lot of different things.
- 8 MR. ALBRITTON: Mr. Lee, if you would bring up DX
- 9 | 91, please, sir?
- 10 \parallel Q. (By Mr. Albritton) What are we looking at here, Dr.
- 11 Becker?
- 12 | A. All right. This is from Fortune Magazine, World's Most
- 13 \parallel Admired Companies in 2010. And what we see is that Apple was
- 14 | ranked No. 1 in computers. And in one of those surveys we
- 15 | looked at earlier, we saw that Apple's brand and reputation
- 16 was a very important reason or factor in people's purchase
- 17 decision.
- 18 MR. ALBRITTON: If you would, let -- Mr. Lee, let's
- 19 go to DX 102, please, sir?
- 20 \parallel Q. (By Mr. Albritton) What are we looking at here, Dr.
- 21 | Becker?
- 22 | A. This is a study that looks at the value of brands and
- 23 comes up with the hundred most powerful brands around the
- 24 | world in different categories, and we'll see that Apple is
- 25 | even worldwide in terms of across all product categories

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- ranked as one of the most powerful and most valuable brands
 in the consumer space.
 - MR. ALBRITTON: Mr. Lee, if you would, please, go to Page 2 of that document, please sir? And if you would, bring out the -- that's -- that's right.
- Q. (By Mr. Albritton) What are we looking at there, Dr. Becker?
- A. Right. We can see that Apple on a worldwide basis is ranked No. 7 in terms of the value of its brand.
- MR. ALBRITTON: All right. Mr. Lee, if you would, bring up Defendant's Exhibit No. 93, please, sir?
- 12 Q. (By Mr. Albritton) What are we looking at here, Dr. 13 Becker?
- This is an article from Time Magazine in November of 14 15 2007 about the iPhone, and you can see in that very first sentence that it said the iPhone changed the way we think 16 17 about how mobile media devices should look, feel, and 18 perform. It goes on to talk about the slick glass, stainless 19 steel case, and the elegant touch display, the two megapixel 20 camera. These are all things that Apple brings to the table 21 and needs to be kept on their side of the ledger.
 - Q. If you would what's -- I notice the date -- what's important about the date of this article?
- A. Well, this touches on a topic that I -- a point I made earlier, namely that the -- these devices are not accused of

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infringing until June of 2009 when the App Store started -or the iTunes Store started offering movies for rent. So the fact that -- I mean, this is already a smashing success of a product. MR. ALBRITTON: All right. Mr. Lee, let's look at Defendant's Exhibit No. 101, please, sir? If you would, scroll down a bit and pull out that on the left? (By Mr. Albritton) All right. Dr. Becker, what are we looking at here? So this is, again, another award that was won is -- by Apple for the iPad, and you can see right in the middle, it says: Apple is the first company that designed finger-friendly hardware and software from scratch, rather than stuffing a PC into a keyboardless case. And they call those results magical and revolutionary. So this, again, is -- they're not describing the way in which people check out of the App Store or the iTunes Store. These are things that Apple brought to the table. Did Mr. Mills consider this type of evidence Ο. sufficiently, in your opinion? Α. No. MR. ALBRITTON: If you would back out of that, Mr. Lee, and let's just look at the top right and -- that's right.

(By Mr. Albritton) So what is this we're looking at,

- this document -- what's it titled?
- 2 A. Well, the -- this -- Time Magazine was looking at 50
- 3 best inventions of 2010 across sort of everything in the
- 4 | economy, so this is a pretty significant invention.
- 5 MR. ALBRITTON: All right. Let's go back to the
- 6 | slides, if we could, Mr. Lee? If you would, let's go to
- 7 | Slide No. 23.

- 8 Q. (By Mr. Albritton) So let's talk about the left side of
- 9 the screen. What did you consider on this point, Dr. Becker?
- 10 A. Well, as this indicates, Factor 13 says that the
- 11 | reasonable royalty has to give Smartflash only royalties on
- 12 | the patented invention and keep all of the other stuff,
- 13 | anything else that's not the patented invention on Apple's
- 14 | side of the table.
- 15 \parallel Q. All right. Dr. Becker, what are the next factors that
- 16 | you considered?
- 17 \parallel A. I looked next at 8 and 10.
- 18 | 0. What are Factors 8 and 10?
- 19 A. Factor 8 looks at the established profitability of the
- 20 | product, its commercial success, the popularity of the
- 21 product, and then 10 says -- one of the things that 10 asks
- 22 | us to focus on is the character of the commercial embodiment
- 23 of it as owned and produced by the licensor.
- 24 So that's the inventor, Mr. Racz. So we look at the
- 25 | commercial embodiment of this invention in the hands of the

- inventor, if they did try to commercialize it and gain some evidence from that.
 - Q. Dr. Becker, what's your understanding about Smartflash's efforts to commercialize the patented technology, or what they say is the patented technology?
 - A. Well, I understand that -- that efforts were made to commercialize it, products were built, and they tried to roll out a product -- Mr. Racz and his colleagues tried to roll out a product that -- that embodied this invention in the, say, 2001 time -- time frame.
 - Q. And what's the importance of that to your analysis?
 - A. Well, it -- it gives us, at least, some indication back to that question of, well, what goes on Apple's side of the table versus what goes on the -- the side of the invention is that here you have the inventor who would know better how to use this, taking the invention and building a product with it, and it's not a commercial success.

And later Apple builds its products, and its products are a commercial success. So it gives, at least me as an economist, some evidence as to what's driving that success, and is it the -- is it reasonably credited to the invention?

And this is one piece of information that suggests that maybe the invention by itself is not enough to -- to have a successful product.

Q. What's the next factor you looked at, Dr. Becker?

- A. Factor 1 is the royalties received by the patentee for the licensing of the patent and whether it proves what's
- 3 called an established royalty.
- 4 | Q. As of June 2009, the date of this hypothetical
- 5 | negotiation, had smart -- Smartflash received any royalties
- 6 for licensing of the patents-in-suit?
- 7 A. No, not to third parties.
- 8 Q. Did you consider any evidence of Smartflash's efforts to
- 9 | sell or license the patents and the patent application?
- 10 A. Yes.
- 11 | Q. If you would, Dr. Becker, let's look at --
- 12 MR. ALBRITTON: If you would, please bring up, Mr.
- 13 | Lee, Defendant's Exhibit 215? If you would, Mr. Lee, pull
- 14 | out the -- the top?
- 15 \parallel Q. (By Mr. Albritton) Tell us what we're looking at here,
- 16 | Dr. Becker?
- 17 | A. So this is an October 2005 email from Mr. Racz to
- 18 somebody named Shane Dodson, and there are a couple of things
- 19 | that I found important in this document.
- 20 | Q. Okay.
- 21 MR. ALBRITTON: If you would, pull that out and
- 22 come down about halfway and bring up right there, for the
- 23 avoidance.
- 24 | Q. (By Mr. Albritton) If you would, talk to us about the
- 25 | importance of what Mr. Racz is saying in this email, Dr.

Becker?

A. Well, there -- the background on this is there had been some -- this is part of an effort to raise money and perhaps sell or license the Smartflash technology. And I think Smartflash had received an offer for 150 pounds for an interest in the technology. And what I find here is that he's, one, giving us an idea of the level of investment that he has at that point in time. It says: Personal funds in excess of \$3 million.

And then, second, we see his intention is to realize a substantial ROI over the life of any granted patents in excess of my own personal investment.

- 0. Now, what does ROI stand for?
- 14 A. That stands for return on investment.
- 15 Q. All right.
- MR. ALBRITTON: Now, let's look at, Mr. Lee, at
 Defendant's Exhibit No. 214, please, sir? I'm sorry.
- 18 Q. (By Mr. Albritton) All right. What are we looking at 19 here in 214?
 - A. This is a document describing what you see in the title there: A Patent Development and Licensing Opportunity. This is a briefing document related to that.
 - And as I understand it, this document is outlining a potential deal that Mr. Racz was at least considering where the patent -- and this is the granted '720 patent, and I

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think you can see they say -- and all future continuations, eventually three patents, so we're talking about the three patents in this case -- that there's terms of a deal outlined in this document. 0. Okay. MR. ALBRITTON: If you would, Mr. Lee, we need to go down to the -- the -- the financial terms, please, sir? MR. CASSADY: Your Honor, can we approach and ask that that be brought down? THE COURT: Approach the bench. (Bench conference.) THE COURT: Yes, Mr. Cassady? MR. CASSADY: Your Honor, when the document was first brought up, there was a reference to contingency fee lawyers, a document that got brought up on the screen. tried to go ahead and ignore it when it was just at the very bottom, but he's starting to scan down. The document clearly calls for the MIL on -- talking about that kind of aspect of litigation and things like that. MR. ALBRITTON: I didn't see that, Your Honor, and certainly I didn't ask him any questions about that. only taking him to the \$200,000 for 20 percent. THE COURT: If you put it back up, is there a way for you to take down and to exclude that portion?

MR. ALBRITTON: Yes, sir. May I have one moment to

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    talk to Mr. Lee?
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               THE COURT: Just direct him to do that, and then
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    let's proceed.
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              MR. CASSADY: Thank you, Your Honor.
               (Bench conference concluded.)
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               THE COURT: All right. Let's continue.
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              MR. ALBRITTON: Thank you, Your Honor. I think --
     just go to the page that talks about $200,000. Right there.
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9
          (By Mr. Albritton) If you would, Dr. Becker, talk to us
    about what is entitled to offer there?
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11
         Okay. So what is being offered here is a 20 percent
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    stake in the company that owns -- granted U.S. Patent
13
    7,334,720 and all future continuations. And we saw on the
14
    first page that that's talking about the three patents in
15
    total eventually. So this is an investment of $200,000 for a
    20 percent stake in the company that owns the -- the
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17
    technology.
         Is this important evidence, in your opinion, Dr. Becker?
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         Yes.
                This -- I understand this to have been a document
    Α.
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    from the fall of 2009, and so this gives me an indication of
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    what parties at the time were considering as the total value,
22
    or at least what an interest in these -- in this technology
    would be -- would be worth.
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    Q. All right, Dr. Becker.
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              MR. ALBRITTON: Now, let's, Mr. Lee, go to
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- Defendant's Exhibit No. 201, please, sir? And if you would, 1 bring up the -- who it's from and the date.
- 3 A. Okay. So here we have, again, Mr. Racz. This is
- 4 October of 2009, so very relevant to that June 2009 time
- 5 period.

- 6 (By Mr. Albritton) And what is this email about, Dr.
- 7 Becker?
- This email is talking about -- again, I find in here 8 9 some evidence of what Mr. Racz was willing to accept or was
- looking for in terms of consideration for an interest in his 10
- 11 patents.
- Q. All right. 12
- 13 MR. ALBRITTON: Mr. Lee, let's go down into the
- 14 body of the first page there. And if you would, highlight
- 15 for us the patent number that's referenced.
- (By Mr. Albritton) Dr. Becker, what is that patent 16
- 17 number?
- 18 This is the 7,334,720. That's the patent -- the first
- 19 of the patents in this case to issue.
- 20 O. All right.
- 21 MR. ALBRITTON: Mr. Lee, if you would go to Page 7
- 22 of that same document. And if you would, bring up the
- highlight and blow up for the Ladies and Gentlemen of the 23
- 24 Jury the last entry to the last statement.
- 25 (By Mr. Albritton) Dr. Becker, what does that say?

- A. So this is -- Mr. Racz is the author of this, so this is

 Mr. Racz saying: My intention is to realize a return on the

 investment I have made over the last 10 years through the

 sale or the licensing of my patent. And that's the '720

 patent.
 - Q. And why is this relevant to you, Dr. Becker?
 - A. Again, this gives us on the ground at the time evidence of what Mr. Racz would have -- was looking for in terms of consideration or value for an interest in the patent.
 - Q. All right. Dr. Becker --
- MR. ALBRITTON: Mr. Lee, excuse me, if you would,
 please bring up Defendant's Exhibit No. 205, please, sir?
- And if you would, first, pull up the first entry
 that starts this intellectual property.
- Q. (By Mr. Albritton) Dr. Becker, if you would, walk us through that first clause on this document?
 - A. So this is a -- a document or a contract -- proposed contract between a company called Saranite Devices, LLC, and Mr. Racz.
- 20 | Q. Okay.

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- A. And it's -- it's an intellectual property purchase and sale agreement. So the subject of this agreement is the buyer is buying or seeking to buy the patent and patent applications, and Mr. Racz is selling them.
- 25 | Q. Okay.

- MR. ALBRITTON: If you would, Mr. Lee, bring up under the -- the first recital. You need to go up, I'm sorry, Mr. Lee, to the first recital. Thank you, sir.
- Q. (By Mr. Albritton) Now, what does the first recital indicate to you, Dr. Becker?
 - A. Well, it indicates that the seller is Mr. Racz, so he's saying I -- he owns certain rights and certain patents, and those are the patents that -- and patent applications, so that's what at issue in this case.

And he desires to sell to buyer, and buyer desires to purchase those rights. So this is a contract that's, you know, giving us some visibility into a real negotiation for an interest in these very same patents.

Q. Okay.

- MR. ALBRITTON: Mr. Lee, now if you would bring up paragraphs -- Article 1.1 and 1.2?
- Q. (By Mr. Albritton) What does 1.1 show, and how does that matter to your analysis, Dr. Becker?
 - A. Well, this gives us the timing of this document, and we see it's November 19th, 2009. So just mere months after the hypothetical negotiation we have a real negotiation taking place that is going to give me, as an economist, some evidence into the value that Mr. Racz and a real-live buyer was putting on the patents at the time.
- 25 | Q. Okay. And what about Paragraph 1. -- or Article 1.2?

- A. Well, it's saying that what the buyer is going to get are the patents and patent applications and anything that issues or comes out of those, so the continuations of the patents, which would include the ones that ultimately issued in 2012.
- Q. Okay. Dr. Becker --

MR. ALBRITTON: Mr. Lee, excuse me. If you would go to Article 2.1, please, sir?

All right. If you would pull that out.

- Q. (By Mr. Albritton) Dr. Becker, if you would, talk to us about what's contained in Article 2.1 and its significance, please, sir?
- A. Yes. The purchase price here, so this company was going to buy the patent and the patent applications and pay an initial cash payment of \$350,000. And we see elsewhere that there's additional consideration.
 - Mr. Racz retains an interest in essentially 20 percent of any licensing revenues that are generated by this company that would buy them, if they were to have completed this transaction.
- Q. Now, why is this important to your analysis, Dr. Becker?
 - A. This gives me another data point that informs a real-life negotiation on the ground at the time of a business deal that Mr. Racz was apparently willing to do.
 - MR. ALBRITTON: If you would, Mr. Lee, let's bring

- 1 up Defendant's Exhibit No. 305, and if you would highlight
- 2 the first half of the page, please, sir? It's at Bates No.
- 3 | 679. Okay. Thank you.
- 4 | Q. (By Mr. Albritton) If you would, identify who this is to
- 5 and the date?
- 6 A. So this is from Mr. Racz. It's to a company called
- 7 | Latitude Investments, Limited. It's dated April 28, 2010.
- 8 | Q. Okay.
- 9 MR. ALBRITTON: Now, Mr. Lee, if you would, pull up
- 10 | the first paragraph under Dear Sirs, and the heading
- 11 | Smartflash Project?
- 12 Q. (By Mr. Albritton) What do you -- we see there, Dr.
- 13 Becker?
- 14 A. So what I see here is a description of terms that have
- 15 \parallel been agreed between these parties for a loan and -- and the
- 16 | acquisition of a 50 percent stake in the patent and other
- 17 | intellectual property regarding rights to the Smartflash
- 18 | technology.
- 19 Q. Dr. Becker, I think I said Defendant's Exhibit 305.
- 20 | This is actually Defendant's Exhibit 350?
- 21 A. Yes.
- 22 | Q. Okay.
- 23 MR. ALBRITTON: Now, if you would, Mr. Lee, go down
- 24 | in the definitions section to where it talks about
- 25 | intellectual property rights?

- Q. (By Mr. Albritton) What are we looking at there, Dr.
- 2 Becker?

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Becker?

- A. So this is describing what this party would -- who is acquiring a 50 percent stake in the patent and other intellectual property.
 - So they're getting more than just the patents. They're getting any software and databases and things that they might have, but included within that are the patent and the patent applications.
- MR. ALBRITTON: And if you would, Mr. Lee, go to 3.3, please, sir?
- Q. (By Mr. Albritton) Is this the provision that relates to the financial terms that you've been talking about, Dr.
- 15 A. Yes. This provides that the -- that this 50 percent interest in the patents is being sold for \$200,000.
- 17 | Q. And what's the significance of this, Dr. Becker?
 - A. This gives another on the ground at the time real-world data point that I can consider in coming up with an evaluation of what a negotiation for a non-exclusive license would have reasonably provided in June of 2009.
- Q. Is it your opinion -- or is it your -- do you believe that it would be improper to not rely on this type of evidence?
- 25 A. Well, I think it would be improper to ignore it. You

- have to consider it and give it appropriate weight in terms

 of the -- you know, when it falls in time, which is very
- 3 close to the hypothetical negotiation date that we're asked
- 4 | to look at.
- $5 \parallel Q$. Did you consider other evidence in this case?
- 6 | A. I did.

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- Q. Tell us about that, if you would.
- 9 focusing on Mr. Racz's desire to get a substantial return, he

Well, primarily, I looked at the question back to this

- 10 said in 2005, and it would give some weight to that, but also
- 11 | look that in 2009 and early 2010, closer to the hypothetical
- 12 | negotiation, those terms seem to have changed and been more
- 13 sort of lower numbers, but I have considered what those
- 14 | returns would be.
- 15 | Q. Okay. Dr. Becker, let's look at Slide No. 26. What
- 16 | factor are we looking at there?
- 17 A. So Factor 15, this is where the hypothetical negotiation
- 18 | comes together. You asked the question, what's the amount
- 19 that the licensor, who's Mr. Racz, and the licensee, Apple,
- 20 | would have agreed upon at the time the alleged infringement
- 21 | began, so June 2009. Let's consider all these factors,
- 22 | consider the evidence that we have from sort of on the ground
- 23 | at the time, and reach a conclusion about what a reasonable
- 24 | number is.
- 25 \parallel Q. Well, what did you ultimately conclude would be a

- reasonable -- would be reasonable for a license as of that
 date of the hypothetical negotiation, June 2009?
- 3 A. I ultimately concluded that an amount that gave Mr. Racz
- 4 | a -- a return on the investment that he had in light of the
- 5 | evidence of his willingness to sell the -- an interest in the
- 6 patents for lump-sum amounts, that that would have been
- 7 | acceptable at the time and would be reasonable for Apple to
- 8 have agreed to.
- 9 Q. What's your understanding of the amount of money Mr.
- 10 Racz had invested as of that time?
- 11 \parallel A. It's my understanding that it was approximately \$3
- 12 | million.
- 13 Q. Now, what's the basis for that understanding?
- 14 A. Well, that number appears in a number of documents. We
- 15 | saw one earlier that -- you know, the total investment in
- 16 | some of the projects may have been higher, but the -- his
- 17 personal funds invested, and he's the person now in 2009 that
- 18 | owns the patent, I understand his personal investment to have
- 19 been approximately \$3 million over the course of, say, nine
- 20 years.
- 21 | Q. Did you do any analysis to determine what would have
- 22 | constituted a return on that investment by Mr. Racz?
- 23 | A. I did.
- 24 | Q. Now, what is a rate of return?
- 25 \parallel A. Well, this is the money you earn on money you invest.

So if you have your money sitting in a, you know, savings account at the bank and you're earning 3 percent on it these days, maybe 2 percent, that's the rate of return you get on the cash that you have in the bank.

If you invest in a company, you expect that at some point that money will come back to you as more money. That's what we all hope. And the rate of return is the percentage increase in that nest egg, as it were, every year.

- Q. What rates of return did you use in your analysis, Dr. Becker?
- A. I considered three rates of return. First is the bar on the left is 26 percent. That's a rate of return that I got looking at data kind of relevant to the time period around 2009 and going back over the time that Mr. Racz had made his investment. 26 percent was an average -- what's called a venture capital rate of return.

Venture capital investments are very risky, a lot of times in high tech. But because they're risky, they generate high rewards. High risk, high reward. And the evidence says that over this time period, a 26 percent annual rate of return. Every year you get 26 percent on your money is something that would -- was consistent with what venture capitalists were earning at the time.

- Q. Okay. What about the middle bar in that bar graph?
- A. So the middle one is the -- is 17.3 percent. That's --

- I looked at what the computer industry had earned. So in around -- sort of as of the end of 2008, looking back 10 years, which is the period of time that Mr. Racz had made his investments, what was the computer industry, the industry that Apple was in, what was it earning, and you see an
- 7 | Q. Okay. And what about on the right side?

average of 17.3 percent over that time period.

- 8 A. The right side is more of just sort of a basic safe
 9 return. 6.2 percent is the average of the prime rate over
 10 this same time period.
 - Q. Okay. Dr. Becker, what did you conclude were the amounts as of June 2006 that would have provided Mr. Racz with these various rates of return on his investment in these -- in this technology?
- 15 A. Okay. I think you said June 2006?
- 16 | Q. 2009, I apologize.

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- So as of June 2009, if I take \$3 million, invest it 10 17 years before June of 2009, and let that investment earn on 18 19 the left-hand bar 26 percent every year, and it's 20 compounding, so you're -- you're earning money on the money 21 you've earned, that by the time you get to June of 2009, is 22 \$30.2 million. And if you do that same process with the computer industry rate of return, you get 14.7 million. 23 24 at the prime rate it's 5.5 million.
 - Q. Okay. Do these represent the amounts that Apple would

- have reasonably needed to pay to provide Mr. Racz with these rates of return?
- A. No. These are what I'd say sort of the total market value, not the piece that Apple would be buying.
 - Q. Well, what does that mean, and why is that important?
 - A. Well, we have to recall that what Mr. Racz would be granting to Apple and all that they're entitled to get at that negotiation is what's called a non-exclusive license.
 - O. What does that mean, a non-exclusive license?

A. Sometimes I describe it as, you know, imagine Mr. Racz has his patent. If he -- if he's giving an exclusive license to somebody, he's going to give them -- hand them the patent and he doesn't have it anymore.

A non-exclusive license, you make a Xerox copy of the patent, and you give it to somebody and say you have the right to use this, but, the patent owner, still have it and I can go license it to anyone else that I want to license it to. So it -- it's not a hundred percent of the value. It's just the right to use and others can -- he still has the patent.

- Q. Well, how did you go about determining the portion of these total amounts that is reasonable for a license to Apple?
- A. Well, I looked at the markets that -- based on documents and business plans at the time Mr. Racz had identified as the

- markets that he thought were relevant for the Smartflash technology.
 - Q. Okay. Do you have a slide about that, Dr. Becker?

A. I do. So if we look at the smartphone, MP3 player, and PC markets. These are three markets that have been identified by Mr. Racz in his documents back at the time, as the markets that were relevant to his technology.

So there's people that he thinks he can go license in those industries.

I looked at Apple's market share in each of those markets as of June of 2009, and we find that when you combine the three markets together, Apple has 20.9 percent of this relevant market as identified by Mr. Racz.

- Q. Well, what did you -- what did you conclude after considering this evidence, Dr. Becker?
- A. Well, since Apple is getting a non-exclusive license and Mr. Racz would still have the rest of the market available to him to go out to license, rather than having this sort of 30.2-million-dollar or \$14.7 million, we have to take Apple's piece of that, which is -- or the 20 percent share of that is 6 million for the substantial return, the venture capital rate of return, or 2.9 million for the computer industry rate of return.
- Q. Okay. And what did you ultimately conclude would be, based on your analysis, the reasonable royalty?

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(Jury out.)

I concluded the -- we'd saw before, 4-and-a-half-million Α. dollars, and I got that as essentially the midpoint between the computer industry rate of return and a venture capital rate of return, giving him something better than the industry that he's even licensing into, namely the computer industry, so he's going to do better than that industry on his money, but not all the way to a venture capital rate of return, which I thought in light of the fact that the previous efforts to license the -- and commercialize the technology had generated losses, no return at all, I thought that was too extreme to give him the venture capital rate of return. So I concluded that 4-and-a-half-million dollars was the midpoint of those and would be reasonable. MR. ALBRITTON: Pass the witness, Your Honor. THE COURT: Ladies and Gentlemen, before the Plaintiff cross-examines Dr. Becker, we're going to break for lunch. Please take your notebooks with you to the jury Don't discuss anything about the case. Follow my room. other instructions, if you will. We're going to try to keep this to approximately 30 minutes so that we can keep moving forward. With these instructions, you're now excused for lunch. COURT SECURITY OFFICER: All rise for the jury.

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               THE COURT: All right. Defendants, you have an
     hour and 22 minutes remaining.
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               All right. We stand in recess for lunch.
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               (Lunch recess.)
 5
                             CERTIFICATION
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 7
                    I HEREBY CERTIFY that the foregoing is a true
 8
     and correct transcript from the stenographic notes of the
 9
     proceedings in the above-entitled matter to the best of our
     abilities.
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     /s/__
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                                            February 23, 2015
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